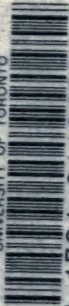


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THE SOUTH AMERICAN SERIES

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BRAZIL



PETROPOLIS : THE SIMLA OF BRAZIL.

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BRAZIL

BY

PIERRE DENIS

TRANSLATED, AND WITH A HISTORICAL CHAPTER, BY
BERNARD MIALL

AND A SUPPLEMENTARY CHAPTER BY
DAWSON A. VINDIN

WITH A MAP AND 36 ILLUSTRATIONS

T. FISHER UNWIN

LONDON

ADELPHI TERRACE

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CONTENTS

	PAGE
INTRODUCTION	15

The antiquity of colonisation in Brazil—The old sugar-growing Brazil—The Brazilian aristocracy—The lower classes in the rural districts—European immigration in southern Brazil—The north of Brazil ; the black and aboriginal races—Population of the towns, and the proportion of foreigners.

CHAPTER I

HISTORY	27
-------------------	----

Position of Brazil among the nations—*Bahia* : Discovery—Settlement—Miscegenation—The Jesuits—The Spanish and Dutch dominations—The Dutch expelled—Nationality in formation—Removal of the Government. *San Paolo* : Settlement—The Paulistas—Jesuit and Indian troubles—Slave-raids—The rush for the mines—The Paulistas lose Minas—Decadence—Revolution—The Paulista nation. *Rio de Janeiro* : Settlement—The French occupation—The French expelled—Rio is created the capital of all Brazil. *Minas* : The mines—Development—Exploration—Anarchy—Gradual settlement—Exhaustion of surface workings. *The Empire* : Dom João a refugee—Dom Pedro I.—Dom Pedro II.—War—Abolition of slavery. *The Revolution and Republic* : Fonseca's dictatorship—Civil war—Recent history—Summary.

CHAPTER II

THE BRAZILIAN LANDSCAPE	79
-----------------------------------	----

The soil—The plateau of the Atlantic coast—Vegetation—The tropical forest of the seaboard, and its influence over the history

of Brazil—The highlands of the interior—Monotony of the Brazilian landscape—Typical landscapes—The country and the city.	PAGE
CHAPTER III	
WAYS OF TRAVEL	96
The ocean ways—The coasting trade—The river traffic-ways—The roads—The ancient highways and their geographical significance—The geography of the Brazilian railway system—Trans-Brazilian and trans-Continental railways under consideration—The railway and colonisation.	
CHAPTER IV	
POLITICAL LIFE	118
The Constitution—The autonomy of the States—The Federal Government—Its increasing prestige—Brazilian Imperialism—The lack of true political parties—The Rio Grande opposition.	
CHAPTER V	
THE ECONOMIC LIFE OF BRAZIL	129
Protection—The Customs tariff—General characteristics of the economic life of Brazil—Distribution of agriculture and industry—Economic history—The export trade in sugar, and the cattle industry—Produce of modern Brazil—The exportation of coffee and rubber—Commercial relations between Brazil and the United States—The economic unity of the country.	
CHAPTER VI	
MONEY AND EXCHANGE	145
The commercial balance and the importation of gold—Paper money—Excessive issues—The depreciation of exchange and its gradual recovery—Opinions upon exchange—Supporters of	

CONTENTS

9

PAGE

high and low exchange—The speculation in exchanges at Rio
—The fixation of the rate of exchange and the Caisse de
Conversion.

CHAPTER VII

SAN PAOLO 164

Historical formation of the Paulista society—Wealth of the soil
of San Paolo—Colonisation in San Paolo, and the extension of
the coffee plantations—The population of the State—The
economic activity of San Paolo and its power of absorbing
foreigners—The schools.

CHAPTER VIII

AGRICULTURAL LABOUR IN SAN PAOLO 181

The abolition of slavery and the advent of free labour—The
colonists—The system of free immigration—The arrival of
immigrants in San Paolo—The *hospedaria*—The *fazenda*—
Labour on the coffee plantations—The Italian question—The
coffee crisis and the plantation labourers—The uncertainty of
rural labour in San Paolo.

CHAPTER IX

SMALL HOLDINGS IN SAN PAOLO 218

The social importance of the small proprietor—Obstacles to the
development of the system of small freeholds—The distribution
of the soil in the Campinas region—The new colonies in San
Paolo.

CHAPTER X

THE VALORISATION OF COFFEE 235

Protection and the coffee industry—The coffee crisis and its
causes—Over-production—First plans for checking the crisis—

Preliminary negotiations with the Federal Government—The intervention of San Paulo on the coffee markets—The formation of valorisation stock—Liquidation—The dangers of protection.

CHAPTER XI

THE COLONISATION OF PARANÁ 267

The formation of a rural democracy in the south of Brazil—Small holdings—The isolation of the colonies—History of the colonisation of Paraná—The colonies around Curitiba—The colonisation of the west—A visit to the Polish colonies of Rio Claro—*Maté*—The San Paulo and Rio Grande Railway.

CHAPTER XII

COLONISATION IN RIO GRANDE DO SOL 292

The situation of the colonies—The forest of Rio Grande—German and Italian colonists—The present prosperity of the colonies—The trade in the products of the colonies—The land question in Rio Grande—Contrast between the colonies and the *campos* of Rio Grande—Colonists and Guachos—The success of the colonial policy in southern Brazil.

CHAPTER XIII

THE NEGRO POPULATIONS 313

Their number—Their distribution—The Minas negroes since the abolition—Competition with Italian labour—Negroes in the sugar-producing districts—Campos—Pernambuco—Urban negro populations—The economic inferiority of the black race in Brazil—Its puerility—Its pleasures—Negro songs and dances.

CHAPTER XIV

CEARÁ 327

The climate of Ceará—The droughts—The Ceará race and its fecundity—Stock-raising—The *vaqueiros* of Ceará—The *mora-dores* and their food-crops—Disappearance of the sugar-cane—The agricultural population of the *serras*—The *serras* and the rainfall—Periodic migration in the region of the *serras*.

CONTENTS

11

CHAPTER XV

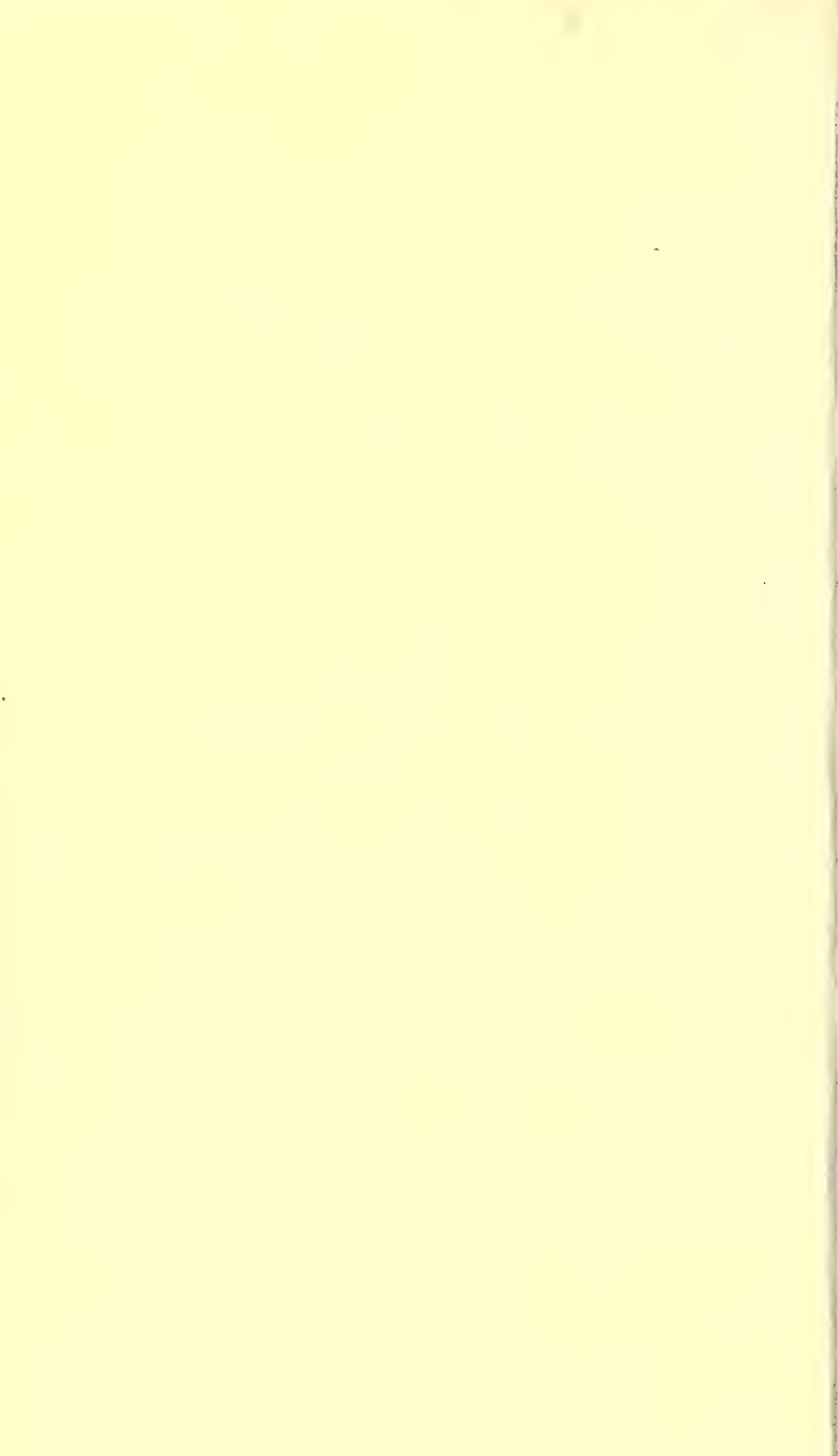
	PAGE
EMIGRATION FROM CEARÁ AND THE PEOPLING OF THE AMAZON BASIN	350

The causes of emigration from Ceará—The drought of 1877-1879
—The *paraóras*—Amazonia before the invasion of immigrants
from the Ceará—The gathering of rubber and the penetration of
the forests—The economic development of Amazonia.

SUPPLEMENTARY CHAPTER

MINERAL RESOURCES, TRADE AND COMMERCE	366
-------------------------------------------------	-----

INDEX	383
-----------------	-----



LIST OF ILLUSTRATIONS

PETROPOLIS : THE SIMLA OF BRAZIL	<i>Frontispiece</i>
	FACING PAGE
AVENIDA CENTRALE, RIO	16
RUA D'ASSEMBLEA, RIO	22
RUA DO OUVIDOR, RIO	30
AVENIDA DO MANGUE, RIO	38
PRAÇA CABRAL, RIO	46
PRAÇA TIRADENTES, RIO	52
AVENIDA BEIRA-MAR, RIO	60
SAN PAOLO : JARDIM DA LUZ	66
SAN PAOLO : JARDIM DO SEMINARIO	66
AVENIDA CENTRALE, RIO	72
PALMS, BOTANICAL GARDENS, RIO	80
CORCOVADO, RIO	87
RIO DE JANIERO : THE BAY FROM THE CITY	94
CROSSING THE SERRA : A VIADUCT	106
PORTO ALEGRE : TH HARBOUR	106
THE LUZ RAILWAY TATION, SAN PAOLO	116
A MATÉ CAMP, PARANÁ	140

14 LIST OF ILLUSTRATIONS

	FACING PAGE
A SHEEP-RUN . . . . .	. 140
SAN PAOLO : GOVERNMENT PALACE . . . . .	. 164
IRRIGATION OF RICE FIELDS, SAN PAOLO . . . . .	. 170
SAN PAOLO : THE POLYTECHNIC COLLEGE . . . . .	. 176
SAN PAOLO : THE NORMAL COLLEGE . . . . .	. 176
SAN PAOLO : AVENIDA PAULISTA . . . . .	. 180
THE "HOSPEDARIA," SAN PAOLO . . . . .	. 196
ON THE DUMONT FAZENDA : A COLONY . . . . .	. 200
By kind permission of the Dumont Coffee Estate Co., Ltd.	
THE COFFEE HARVEST . . . . .	. 206
By kind permission of the Dumont Coffee Estate Co., Ltd.	
COFFEE PLANT : PULPING HOUSE AND FERMENTING TANKS . . . . .	. 214
By kind permission of the Dumont Coffee Estate Co., Ltd.	
HARICOTS : NOVA ODESSA . . . . .	. 228
A RICE FIELD, SAN PAOLO . . . . .	. 234
FALLS ON THE RIO DOS PATOS, PARANÁ . . . . .	. 286
A COLONY : RIO GRANDE DO SUL . . . . .	. 292
A COLONY : RIO GRANDE . . . . .	. 298
SPANISH CAMOMILE : RIO GRANDE . . . . .	. 306
A PROVINCIAL CAPITAL—PELOTAS, RIO GRANDE . . . . .	. 312
SUGAR-CANE . . . . .	. 322

INTRODUCTION

The antiquity of colonisation in Brazil—The old sugar-growing Brazil—The Brazilian aristocracy—The lower classes in the rural districts—European immigration in southern Brazil—The north of Brazil; the black and aboriginal races—Population of the towns, and the proportion of foreigners.

THE Brazilians are fond of calling their country a young country. They are, it is true, full of hope respecting its future, and they are conscious that the present is full of promise. But Brazil is not a new country in the sense of having neither a past nor traditions. Although the past is not so completely effaced in Brazil as it is elsewhere, and although tradition and history have more vitality, the European arriving directly from Europe will scarcely notice the fact; but it will strike him very vividly if he comes to know Brazil after travelling in other American countries, such as the Argentine or the United States. He will feel less "foreign," less expatriated; he will not experience the sensation of surprise or amazement which he is likely to experience in the Argentine or the United States; countries with an imperfectly settled social organism, lacking in radical foundations and the social hierarchy; their only motive power the love of individual independence and the craving for wealth. Brazilian patriotism is not merely the gratitude felt by a newly-settled population towards the country which has given it a competence, and the egotistical ignorance of all that

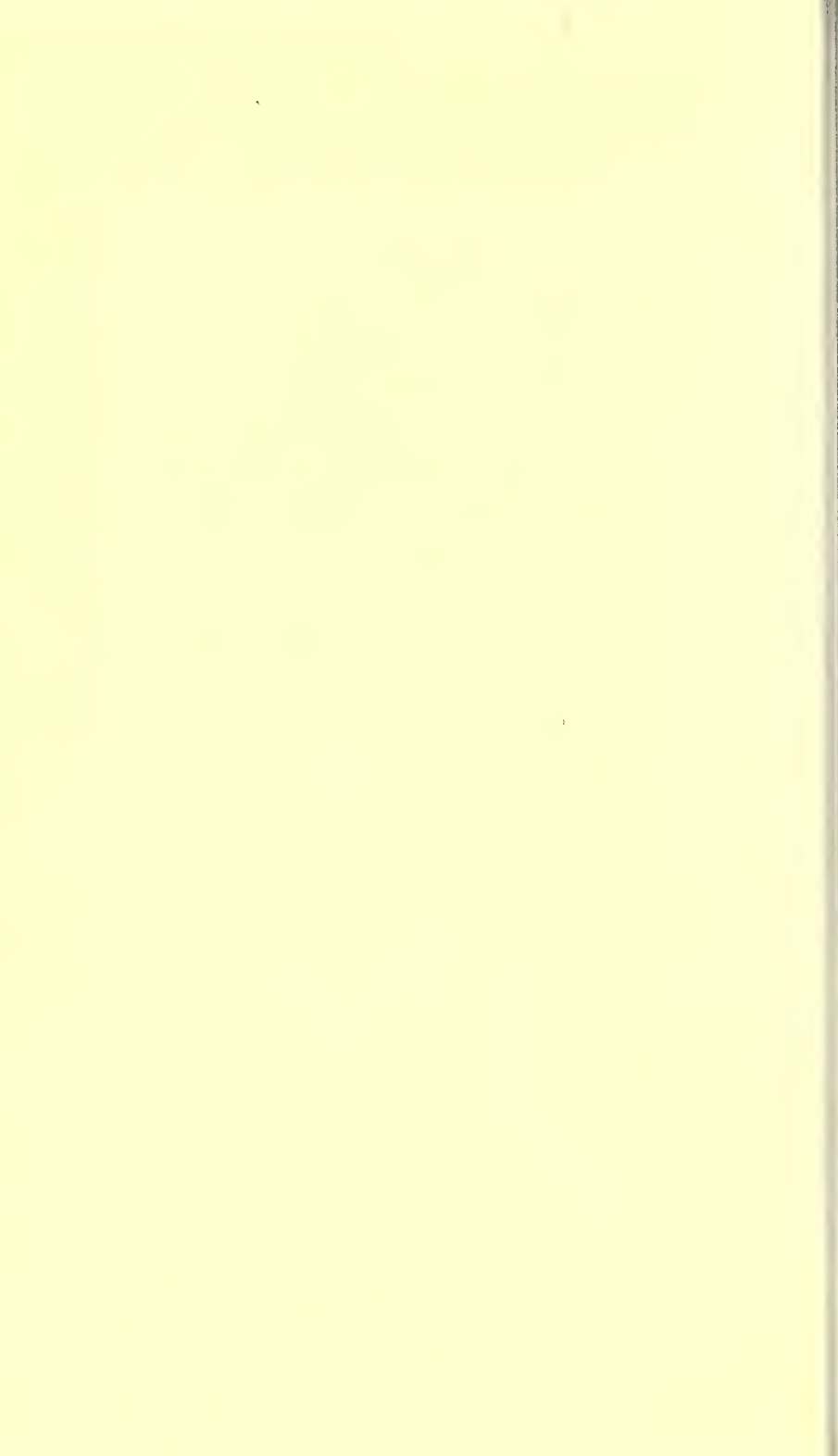
contributes to the charm and the dignity of life in Europe. Brazil is more conscious of her past and less conscious of herself.

Brazil, then, is in one sense an old country. For this reason it is of greater interest than any other part of America. It has been peopled by white races for more than three hundred years. The variety of soil and climate has had time to fix its imprint upon the inhabitants. According to the manner of their lives, the kind of produce they have engaged themselves in raising, and the occupations open to them, they have gradually assumed different customs and different mental characteristics. One finds in Brazil not a uniform type of civilisation, but surprisingly different modes of existence, which betray the gradual action of moral and physical influences. This diversity is betrayed and increased by racial diversity. Here the Portuguese race has remained almost unadulterated ; there, it is completely mixed with, and almost absorbed by, the indigenous race ; here, again, it has been grafted upon the imported negro races ; there are, in fact, several different populations, each possessing its own characteristics, its peculiar activity or idleness, its own amusements and folklore.

That Brazil is a civilised country of considerable age is almost entirely due to the fact that it is a tropical country, adapted to the culture of the sugar-cane. Sugar, indeed, was the first agricultural product which Europe demanded of the American colonies. If we compare Brazil with the United States we find that its economic and physical peculiarities are almost entirely due to its position in the tropics. The territory comprised between the Amazon and Rio, and the coastal district to the north of Rio Bay (to say nothing of the interior) has no equivalent in the United States, but approaches the West Indies in the splendour of its equatorial vegetation, and the early



AVENIDA CENTRAL, RIO.



history of Brazil also is like that of the West Indies. Its oldest cities, Bahia and Pernambuco, have existed by the sugar trade, like the old West Indian cities. The planting of sugar in Brazil, as elsewhere, created, as early as the seventeenth century, not only a long-enduring industry, but also a long-enduring wealth.

While an agricultural community sprang up near the coast, mines were opened in the interior. This past has left its traces. The fields of sugar-cane have not disappeared ; the mines are still worked. Before it was the political capital of a modern Federal State, Rio de Janeiro was the trade outlet of the sugar-growing plains of Campos and the mines of the interior. In spite of recent transformations, nothing has yet been able to deprive the old colonial metropolis of its picturesque and fascinating individuality.

The economic history of Brazil differs profoundly from that of the United States ; the parallel between the two countries, which is a frequent subject of conversation in Brazil, is nowhere exact. Although San Paolo has attained, in the Brazil of to-day, the preponderant position held by Virginia in the United States of the eighteenth century ; although it has, like Virginia, produced both statesmen and financiers, and although "Paulista" society, with its landed aristocracy, recalls the Virginian society of long ago, the analogy can be pursued no further. Virginia, although one of the southern states, imposed itself upon the colder states of the north, whose growth had been more deliberate, by means of its old economic power. The economic greatness of San Paolo, however, is recent ; by the side of the tropical states over which it exerts its influence to-day it is a newcomer, an upstart.

Again, there has been nothing in Brazil like the irresistible movement towards the west, the successive

settlement of forest and prairie, the national epic, in short, which during the nineteenth century created the North American nation. The Brazilian colonists of the Rio Grande and the Paraná cleared the forests, as did the pioneers of Kentucky and the Ohio ; but the Argentine frontier cut them off from the plains of the Pampa, an obstacle to the passage of a population of settlers. Immigration into the Argentine has proceeded from Europe ; the Brazilians have remained confined to their forests. There have been in the history of Brazil none of those revolutions, those national renewals known to other countries, whose influence has been so profound that all that preceded them has retained a merely archæological interest.

Brazil possesses what the United States and the Argentine do not : a true aristocracy, the privilege of an old society. It is true that her political organisation is perfectly democratic,¹ and wherever I have gone I have met with profoundly democratic convictions ; but neither the constitution nor political theories can alter historical facts. Except in the southern states, which were largely populated by the immigration of the nineteenth century, there is everywhere above the working classes, which are often of black or of mingled blood, a ruling class of almost purely Portuguese origin.

Almost everywhere the land belongs to this ruling class. Brazil is essentially an agricultural country, and this class is for the most part rural. The distances between one estate and another are great, condemning many families to isolation. In the cities, and especially in Rio, where social life is more developed and the

¹ In theory every literate adult not a monk or serving in the army possesses the suffrage. But only some 20 per cent. of the population is literate, and many voters have no convictions, but vote from local prejudice or persuasion.—[TRANS.]

national character tempered by contact with foreigners of all nationalities, the country magnates, ignorant of the ephemeral passage of the fashions, are the subject of ready ridicule. The country magnate has been christened; he is known as a *caipire*; and his name is never pronounced without exciting merriment. But it is a curious fact that the Paulista proprietor is not a *caipire*. The large Paulista landowner leads an active life in the midst of his plantations. He travels, runs up to the city, and follows the movements of the coffee market; but we must add that even in San Paolo agriculture on a large scale is a relatively recent thing. The *caipire* descends upon Rio from the State of Minas. It is in Minas that he originally dwelt; and there perhaps may still be found *fazendas* on which the family lives luxuriously, yet without resources; exporting little, demanding scarcely anything from the rest of the world, and all but untouched, in their isolated existence, by the vicissitudes of economic revolutions which bring havoc upon distant markets. In such surroundings, says popular satire, time and nature have evolved the *caipire*. He is, of course, only a literary type, and therefore a caricature; but a caricature that one cannot pass over, for in analysing his character we discover a reflection of the rural life of Brazil, just as we can reconstruct the whole Prussian countryside from a study of "Le Pauvre Michel."

I have always been struck by the very general taste for a country life which is manifest in Brazil. Young men willingly leave the city to live upon the *fazenda*, and men whose fortune is made gladly return to the old agricultural life, preferring it to the more modern existence of the suburbs. I have rarely heard a Brazilian complain of life on the *fazenda*. These tendencies I am inclined to attribute less to the natural charm of rural Brazil than to the fascination it exercises over those who

are, by the very organisation of society, the paramount rulers of the Brazilian countryside ; for the *fazenda* is something between a family and a kingdom. On the *fazenda* the *fazendeiro* is master. It is only natural that he should enjoy his power. Such authority as he knows has vanished, perhaps from the greater part of the world ; but in Brazil it rules unquestioned, forming a powerful bond between the soil and its owner.

In the solitude which he inhabits, receiving slowly the news of the world, though not so slowly as of old, the landowner indulges his love of intellectual culture ; he inclines toward philosophy ; he possesses a certain natural eloquence. More than once I have discussed positivism on the *fazenda*. We know what the influence of Auguste Comte has been upon Brazil ; if it is gradually decaying in the great cities, it is still a living thing in the provinces.

One of the qualities of the *fazendeiro*, one which I ought particularly to mention, is his extreme hospitality. In cordiality, delicacy, and unfailing tact the hospitality of the Brazilian surpasses the imagination of the most hospitable of Europeans. The *fazendeiro* will make every possible effort to render his house agreeable to you ; if you wish to take the air the best horse is at your service ; or the safest, according to your talents as a horseman ; the eldest son of the house will be your companion. After dinner the family will search among the gramophone discs for the latest music, the latest French songs. In the morning, upon your departure, your host, cutting short your thanks, will assure you of the gratitude he owes you for your visit. I have witnessed this scene a score of times, and each time—whether or not I owed such fortune to my French nationality—I felt that I was received as an old family friend.

Such hospitality introduces one to the heart of many

families. These families, too, are large ; ten children are considered in no way extraordinary. Paternal authority is respected ; the son, upon his entrance, kisses his father's hand. The wife is occupied with household cares ; the husband's duty is to do the honours of the house. A stranger rarely sees Brazilian women, except as the guest of a Brazilian family. The women do not receive male callers ; for them, or so it seems to me, mundane life ceases upon marriage.* They marry, I believe, very young, and are absolutely under the marital thumb. Outside their family their independent life is extremely limited. Admirable mothers, one knows them rather by their children than personally ; they seem to cherish their domestic obscurity. The traveller who lands in the United States is immediately surrounded, questioned, advised, and chaperoned by the American woman ; there is nothing of this sort in Brazil.

In addition to its social authority, this Brazilian aristocracy enjoys political power as well. Brazil has, it is true, established universal suffrage ; but the sovereign people, before delegating its sovereignty to its representatives, confides to the ruling class the duty of supervising its electoral functions. The large landed proprietors choose the candidates, and their instructions are usually obeyed. They form the structure, the framework, of all party politics ; they are its strength, its very life ; it is they who govern and administer Brazil. And the administration is a great power in Brazil. Its province is very wide, and much is expected from it ; whether the explanation is to be found in Latin atavism, or in the material conditions of life in this limitless territory, or in the fact that the individual is so powerless, and association so difficult.

* This is not the case among the business and commercial circles of Rio and San Paolo, where many of the women are educated in Paris and visit it yearly.—[TRANS.]

It is only a slight exaggeration to say that the administration plays the same part in Brazil as in a European colony like Algeria, or as in India.

Between the members of the all-powerful administration who during my travels granted me facilities, and their friends and relations, whose hospitality I enjoyed in their *fazendas*, I was perhaps in danger of becoming exclusively acquainted with the superior social class of which a portion directs the agricultural exploitation of the country while the remaining portion governs it. It would be a great mistake to suppose that this class, by itself, is Brazil. I have done my best to see beyond it, and to keep in mind the populace, which is both more numerous and more diversified ; a confused mass of people upon whom, before all else, the whole future of Brazil depends. It lives under a benign climate ; or at least under a climate which makes impossible what we call poverty in Europe. It is also a rural class ; all the agricultural labour of the country is performed by its hands.

In southern Brazil the population has been renewed, all through the second half of the nineteenth century, by a stream of European immigration. In San Paolo the Italians have provided the long-established Paulista population with the labour necessary to the extensive production of coffee. They live on the plantations, in villages which are veritable cities of labourers. Nothing ties them to the soil ; they do not seem to feel the appetite for land ; very few buy real estate. They bind themselves only by yearly contracts ; they readily change their employers after each harvest. No more nomadic people could be imagined ; they change incessantly from *fazenda* to *fazenda*. Neither is there anything to retain them in the State of San Paolo ; and not the least danger of the coffee crisis is the exodus which it is producing among the Italian colonists.



RUA D'ASSEMBLEIA, RIO.



Further south, from Paraná to Rio Grande, immigration has resulted in the settlement of a very different population: a small peasant democracy, composed of Poles, Germans, and Venetians. Being proprietors they are firmly rooted to the soil. Just as the influx of Italians to San Paolo was not a spontaneous movement, but the work of the Paulista administration, so the German and Polish colonisation of the south was evoked and subsidised by the Government of Brazil and the interested provinces. The newcomers were sent into regions hitherto unpopulated, where commercial communications could not be established and economic vitality was unknown. There they lived abandoned to themselves, without neighbours, without customers. The political and artificial origin of these colonies condemned them to isolation; isolation kept them faithful to their national customs and languages, which they would soon have abandoned under other circumstances.

Will these populations of alien blood ever become assimilated? This perhaps is a simpler problem than that which San Paolo has to solve, where it is sought not to assimilate the emigrants, but to attach them to the soil.

The north of Brazil has not been a centre of European immigration. Wherever sugar was planted before the abolition of slavery the negroes are numerous; in Campos, Pernambuco, and in Bahia, where the sugar industry has now disappeared. No one disputes with them the severe labour of the sugar plantations; and as no other workers are available in those parts they are set to work, as free labourers, at the tasks they once performed as slaves. Indifferent workers, intemperate, unambitious, and scorning regular employment, they form the least desirable element of the rural population of Brazil.

Another type of agricultural worker is found in the extreme north of Brazil, in the province of Ceará. There Portuguese half-breeds and Indians undertake the breeding of cattle. Ceará is a very poor country, subject to devastating periodical droughts which destroy the herds. Poverty sends the Cearenses far from their home. They have peopled all the basin of the Amazon ; it is the emigrants from the Ceará who gather rubber on the tributaries of the great river. While southern Brazil has had to appeal to Europe to people its plateaux, equatorial Brazil has already a population of native colonists, who are prolific and already inured to the climate.

The only portion of the population which is really urban consists of the foreigners, business men of all kinds, whom one meets in Rio, San Paolo, and certain other large cities. The greater part of the business affairs of the country is in their hands. Precisely because Brazil, a colonial State, lacked an indigenous urban population, the number of foreign traders and men of business has increased with great rapidity as the country has developed. But the German, English, or French elements of the urban populations have no great influence on the national life. They mix little with Brazilians ; they remain attached to Europe, seeking to make their fortunes as soon as may be in order to return home. They are the least impartial authorities upon all matters Brazilian that one could possibly find.

With another urban element, also foreign, it is otherwise : I mean the Portuguese element. Immigration from Portugal has always been considerable, but it has not been dispersed over the rural districts, as Italian immigration has been. Every Portuguese arriving in Rio has one great advantage over his rivals, the immigrants of other nationalities : the language he

speaks is the language of the country. All the callings and professions of the city are open to him ; no one can compete with him. If, as often happens, his talents are commercial, he will become a shopkeeper or merchant. The Portuguese are not, like other foreigners, confined to wholesale commerce ; in Rio the retail trade is entirely in their hands. They mix with the Brazilian population, from which it is difficult to distinguish them. The Portuguese have played a great part in the formation of modern Brazil, for they have largely contributed to the formation of the urban population ; and the question of Portuguese influence would be of the greatest significance if the true Brazil were to be found in the cities.



BRAZIL

CHAPTER I

HISTORY

BY THE TRANSLATOR

Position of Brazil among the nations—*Bahia*: Discovery—Settlement—Miscegenation—The Jesuits—The Spanish and Dutch dominations—The Dutch expelled—Nationality in formation—Removal of the Government. *San Paolo*: Settlement—The Paulistas—Jesuit and Indian troubles—Slave-raids—The rush for the mines—The Paulistas lose Minas—Decadence—Revolution—The Paulista nation. *Rio de Janeiro*: Settlement—The French occupation—The French expelled—Rio is created the capital of all Brazil. *Minas*: The mines—Development—Exploration—Anarchy—Gradual settlement—Exhaustion of surface workings. *The Empire*: Dom João a refugee—Dom Pedro I.—Dom Pedro II.—War—Abolition of slavery—*The Revolution and Republic*: Fonseca's dictatorship—Civil war—Recent history—Summary.

THE position of Brazil among the Republics of America is in many ways unique. The oldest civilisation in America, she stands only on the brink of modern development. She is governed by a white aristocracy; yet that aristocracy is almost wholly sprung from the male adventurers of mediæval Portugal and the women of the Indian tribes. For long an appanage of Portugal, her more vital members were in many ways independent; yet, alone of all American nations, Brazil has been a monarchy within the memory of the younger generation.

Her history is complex in the extreme; for Brazil

was settled at many points, developed into many colonies, and to this day consists of many peoples. Her later history is politically of no little interest; her earlier history is of the very greatest value, as affording a unique example of the evolution of a race.

This history, moreover, is almost unknown to the general reader. Indeed, I know of no history of Brazil published and still in print in England. The literatures of other countries are little richer in this respect. The fact is that a presentation of the colonial period would alone fill volumes; while a modern political history would offer difficulties even to a native historian.

Great as would be the difficulties of writing a standard history of Brazil, they need not concern nor intimidate the writer of a preface. Even the briefest summary of that history should have its interest as an example in sociology; should help one to understand the people, and to speculate upon its future. Although Brazil was settled at many points, and still consists of many peoples, it will suffice here to take three of these points, and briefly to trace the growth of the three principal settlements. This is not the place to speak in any detail of the mineral resources of Brazil; but they must be mentioned here as the cause of a bloodthirsty conflict, and the principal factor in the settlement of a fourth province—that of Minas.

Dealing first with the period of discovery and settlement, or the colonial period, we may then pass on to the Empire; then to the Republic and the modern period.

I. THE COLONIAL PERIOD: DISCOVERY AND SETTLEMENT.

BAHIA.

Nearly twenty years before the conquest of Mexico by Cortes, and as long before the discovery of the

Pacific Ocean by Magellan; three years after Vasco da Gama's voyage to India round the Cape, and eight years after the discovery of the mainland of South America by Columbus, a Spaniard named Pinzon, an old comrade of Colombus, with whom sailed Amerigo Vespucci, sighted the coast of what is now Brazil, reconnoitered the mouths of the Amazon, and proceeded upon his voyage to the Indies. A few months later—at Easter, 1500—Pedro Alvarez Cabral, who, while endeavouring to avoid the Guinea calms when making the voyage to India, had fallen into the Brazilian current, sailed into a bay which he named Porto Seguro, and with due religious ceremony took possession of the land in the name of the King of Portugal. He sent a vessel back to Lisbon with the news, supposing that he had reached the further side of India; and, first marooning two of his crew, one of whom was to play a remarkable part in the settlement of Brazil, he proceeded to his destination, Calicut, whither he was dispatched under the orders of the famous Vasco da Gama.

The first cargoes to reach Lisbon contained a mixed cargo, partly of dye-woods. Certain dye-woods were known to Chaucer as Brazil-wood; in the fifteenth century the term was in common use to denote certain vegetable dye-stuffs; so that although the official name for the new country was the Land of the True Cross—Vera Cruz—it soon became known as Brazil.

Portugal had begun her career of colonial expansion under Henry the Navigator, who had discovered, about the middle of the fifteenth century, the Azores, Cape Verde, and Madeira, and had instituted the trade in negro slaves—a trade which was eventually to contaminate the people of Portugal. Portugal was nearing the zenith of her power. João II., who died in 1495, had eventually broken the might of the feudal nobles;

Lisbon was becoming the Venice of the West, and the wealth and power of Portugal were increasing as a result of her discoveries, and her naval and mercantile enterprise.

Manoel, João's successor, upon the arrival of Cabral's vessel, fitted out a fleet to make good the new discovery. Cabral, returning from Cochin, encountered this fleet off Cape Verde, and with it returned to Brazil. In this fleet, and in one of the following expeditions, was Amerigo, the first discoverer of the American mainland, who had been with Pinzon at the first sighting of Brazil. The two fleets together explored the greater part of the Brazilian coast.

In 1503 a second fleet was dispatched, under Duarte Coelho, who was to seek for a western passage to India, Brazil being then and for some years longer regarded as the eastern limit of Asia. He suffered shipwreck, but marched along the coast as far as the site of Bahia, where he waited for his scattered fleet. He then sailed southwards, founding a small settlement at Caravellas.

From 1506 onwards nearly all the fleets going to or coming from India or the Indies used to touch at the Brazilian coast. But at this time the eastern discoveries of Portugal absorbed the activities of her navy, and the French were early attracted by the new discovery. For years they landed at convenient points, treating the Indians diplomatically and with success. At last, in 1526, a fleet was dispatched from Lisbon with orders to beat them off. Having defeated the French, the Portuguese founded a post at Pernambuco. This was twice sacked in the following year; once by the French and once by Hawkins.

Loth to renounce his title to Brazil, João III. conceived a plan whereby he might ensure the occupation of the country without loss to the exchequer, and with-



RUA DO OUVIDOR, RIO.



out withdrawing his maritime forces from the Indies—by which, too, he might rid himself of inconveniently active or powerful nobles. He decided to divide the country into *capitaneas*; a kind of feudal fief, to be bestowed upon such of his subjects as would undertake, at their own cost, to settle, pacify, and develop the new country. In return they would be made governors, with powers of life and death. The fiefs, or *capitaneas*, were each to have an ocean frontage of 150 miles, while their depth would be unlimited.

Herein lay the creation of the Brazilian people. Hitherto no serious attempt at settlement had been made; only a few isolated posts existed. Now, in the heroic age of Portuguese history, Brazil was handed over to private adventurers. To settle fifteen strips of coast, each 150 miles in width; to effect the conquest of the regions inland as far as the mountains or the Indians would allow; to subdue, expel, or exterminate tribes of warlike anthropophagous aborigines; to create plantations of such extent as to make the undertaking profitable; to cut roads, to open trade, to defend the remoter settlers: all this demanded a constant supply of hardy adventurers; not only feudal lords (of whom Portugal had to spare since the breaking of their power), and their retinue of officers and soldiery and priests, but handicraftsmen, traders, clerks, sailors, and prospective settlers. Hundreds and even thousands went to make the first settlement of a captaincy, and for two centuries there was a coming and going of governors and officers, sailors and soldiers, and a variable stream of permanent immigration. Lastly, these men were of a savage, hardy strain, the loss of whom to Portugal did much to cause her pitiful decadence; men of Iberian stock with a Celtic admixture, with more recent additions of Saracen blood in the centre, and slight traces, gradually increasing, of

negroid blood in the south. Here, obviously, was the seed of a nation ; a hardy stock that should endure for a long period of history. The mortality among settlers and traders alike was enormous ; only the toughest of that hardy stock survived.

To promote the King's policy (already applied in Madeira), Affonso de Sousa was dispatched, in 1530, as Admiral of the Coast, with a fleet of five vessels and four hundred men, and powers to delimit the *capitaneas*. Seizing three French vessels at Pernambuco, he presently anchored in the Bay of Todos os Santos. There he found, living with the Indians, as a chief and patriarch, with a village of his own, a Portuguese sailor ; none other, it appears, than one of those whom Cabral had marooned ; though some describe him as a noble. Many Bahians claim him as an ancestor, and he seems already to have been the father of a little tribe. Some accounts declare that his name—Caramurú—signified "Man of Fire" ; for when attacked by the Indians he had called down lightning—with a musket ; some interpret it as "Big Fish Caught among Rocks." However this may be, he was no mean man ; like a pious mediæval Catholic, he had taught the friendly tribes such arts of civilisation as he was able to impart ; he had raised a little chapel in commemoration of a victory, where to-day stands the church of Our Lady of Victory, containing in one of the chapels a tablet in memory of one of his sons-in-law.

Here Affonso, under the protection of this Caramurú, whose patronymic was Correia, founded the post and factory which grew to be the city of Bahia. He then proceeded to Rio, where he remained for some three months, and founded, near the present site of Santos, a fortified post, São Vicente. He performed his work of delimitation, and the *capitaneas* were one by one granted to suitable applicants ; but only in a few

cases did the captains successfully hold them, so that finally the Crown must perforce take a hand in the game.

The *capitanea* of Bahia was granted to one Coutinho, a wealthy Portuguese landowner. On proceeding to his fief in 1534 he was welcomed by Correia and his Indians; so friendly indeed were their relations that Coutinho thought it safe to grant his followers (perhaps the more difficult of them) holdings at some distance from the coast; thus forming an actual colony, and not a mere fortified town. No longer under the eye of their feudal lord, yet conscious of him and all Portugal at their backs, the colonists began to enslave and ill-treat the Indians. The opportunity of playing the demigod was too great for these suddenly enriched adventurers, used to the close military and spiritual discipline of mediæval Europe. The eventual result was an Indian rising. Coutinho promptly recalled his colonists; they revolted, and he broke up the colony, returning to Porto Seguro. Thus did a few adventurers lose their bearings with their old environment, and sow for ever the seeds of distrust and hatred. The Indian had received his ideal of the white race: a race of dangerous demigods, who enslaved him, took his women, forced him to labour, and replied to forcible argument by the lash, the bullet, or the gallows. Much of the half-unconscious life-work of Correia was undone, and hatreds were let loose that ended in wars of extermination.

Correia, of course, remained; his followers were not affected. Coutinho, at his request, set out again for Bahia, but was wrecked, and devoured by the cannibals of an island facing Bahia.

This disaster hastened the settlement of the country. Dom João decided to found a royal *capitanea*, which should uphold the rest, and serve to knit them together.

To this end he bought out the heirs of the unhappy Coutinho, and in 1549 Thomé de Sousa landed at Bahia as Captain-General, with judges, priests, and four thousand men : all the raw material of a nation, save the wives.

The invaluable Man of Fire was now very old, but friendly as ever, and more than ever the patriarch. He welcomed the new Governor and lodged him in his village ; but Sousa required a better landing, and founded his town about a mile and a half away. A palisaded fortress was built, and cattle were imported from the Azores ; the forbears of the half-wild herds that used to cover all the prairies of Brazil.

We may suppose that the King's intention was firstly to form a settlement ; secondly, to make money. The garrison would be renewed from time to time ; the settlers would please themselves in the matter of returning for wives. But miscegenation was of course inevitable ; the existence of the Brazilian people was already assured. Caramurú offered a striking example of patriarchal customs ; he also had many descendants of mixed blood. The Portuguese clergy were not slow to follow his example ; the settlers followed their pastors. The Jesuits were loud in disapproval ; for this method of founding a nation, however excellent in practice, as regarded the Tropics and the times, was not such as the stricter clergy could approve. Upon the advice of the Jesuits Bahia was elevated to a bishopric ; and the creation of this bishopric must have been a considerable factor in the creation of the Brazilian race. Mere promiscuity gave rise to a generation of half-breeds. The Bishop, the Jesuits, and the now chastened clergy might certainly permit of marriage with Indian women, but they would favour the children of Christian fathers. Moreover, such children would often be educated by the

Church, or at least in its shelter ; would be more domesticated, more akin to the European in habits and in ways of thought. Thus the factor of natural preference received an artificial impulse in the favour of half-breed or quarter-breed wives. When the Portuguese first settled at Bahia there were already half-breed and quarter-breed women of the race of Caramurú. By 1550, or a little later, there would be a generation of marriageable quarter-breeds ; by 1570 a generation practically Portuguese. The process of selection by colour steadily proceeding, it is easy to see that the new race would speedily consist of an aristocracy almost purely European, with a considerable race of male half-breeds, the more successful of whom would take women not wholly Indian, thus forming a race of half-breeds which would be, and was as lately as thirty years ago, constantly recruited ; while others would relapse to the Indian stock, introducing an alien strain and superior mental qualities. It must be remembered that there was less individuality in the sixteenth century than now ; men were constantly under the eye of the Church ; public opinion was not a force to be defied. Outlying settlers, and even citizens, might possess Indian slave-women and increase the stock of half-breeds ; but the general tendency would be towards marriage with a white or nearly white woman. The result of miscegenation would be, as we have seen, the production of an almost purely European ruling race in the short space of forty or sixty years. At first sight such a result may seem impossible ; a moment's thought will show it to be inevitable. Thus the amount of Indian blood in the ruling classes of Brazil is generally infinitesimal. That it sometimes appears to be considerable may be due to the probability that the Indians, as the race subjected to the severest conditions of natural rejection, would incline to be

physically prepotent, while the Portuguese would be prepotent mentally. Each race would gain ; each race was warlike and of an incredibly hardy stock ; the restless adventurers of feudal Portugal and the beasts of burden of the coastal Indians gave the race a physical basis which should save it from degeneration for many generations yet to come.

Thomé de Sousa, after a term of four years, was replaced by Duarte da Costa ; an arbitrary person, who was quickly expelled by a revolt of the colonists, in which the Bishop was a leader. Da Costa, on sailing for Lisbon, was wrecked upon the coast, and, like a better man, was devoured by cannibals. In his place came Mem de Sá, noted for driving the French out of Rio, for appreciating the incomparable bay, and for founding there a second Royal Captaincy for the protection of the southern settlements.

In 1570 the Jesuits took a step which had an unfortunate effect on the Brazilian race.

The Jesuits were ostensibly missionaries ; much of their work was admirable ; many of them were, if not saints, martyrs ; most were men of exceptional ability. Had the Indian question been left entirely in their hands there might have been no wars of extermination ; on the other hand, the complete loyalty of the Indians to the Jesuits might have given them a dangerous power.

From their first arrival in South America they penetrated the unsettled districts, founding their famous "reductions" or missions : a cross between an Indian agency, an ordinary mission, and a thriving plantation. Their reductions, in short, were benevolent autocracies with a touch of collectivism. They "saved" the Indians, made them conscious of spiritual need, which they gratified, and material needs, for which they had to work. They protected them ; armed them against their enemies,

and fed them when hungry, and both parties profited. The settlers disliked the Jesuits because they drew too heavily upon the bands of friendly Indians suitable for "domestication" or enslavement. Perhaps the Jesuits also disliked the settlers for diminishing their labour market, for the Jesuits needed wealth to increase their power in Europe; they also accused them of cruelty and debauchery, probably with perfect justice, for there was nothing gentle about the landless "flock of falcons" who swooped upon South America.

In 1570, then, the Jesuits obtained a decree abolishing the further enslavement of Indians.

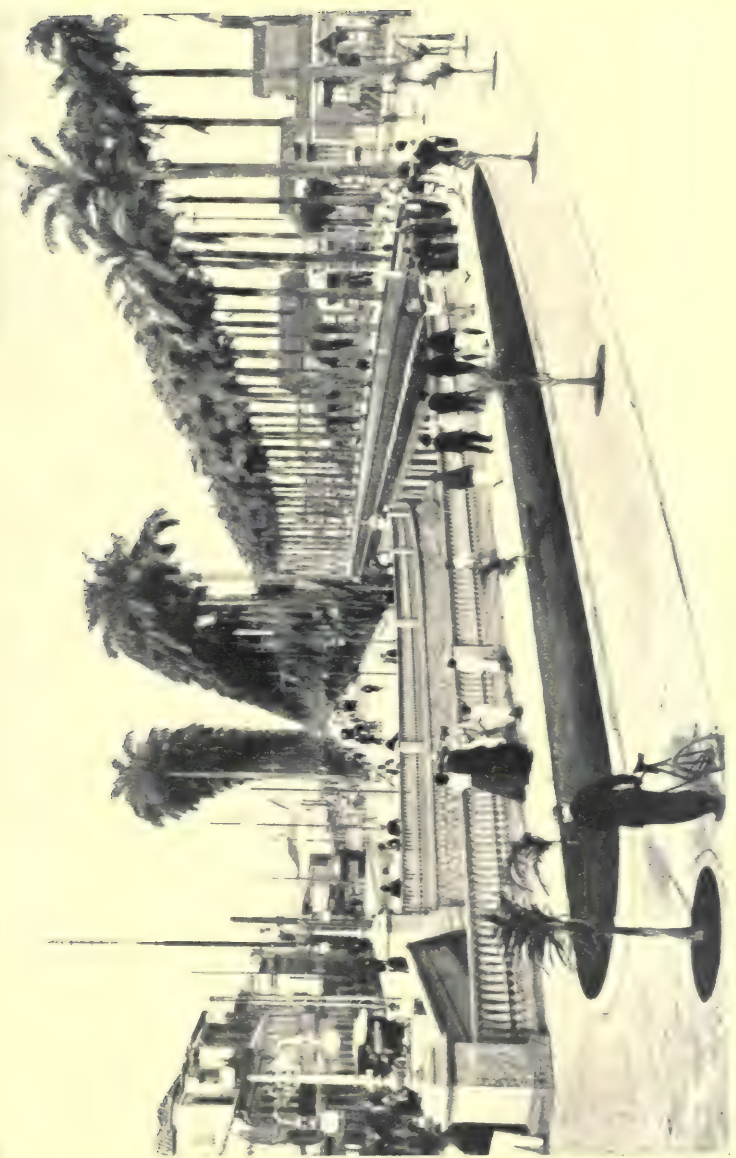
By this time, as we have seen, the offspring of the first settlers formed, together with the newcomers from Portugal, the nucleus of a hardy, energetic white race, well fitted to conquer and to settle a semi-tropical country. By the simple process of selection the ruling portion was becoming more purely Portuguese; a stock originally hardy re-enforced by a still more hardy native stock; a race of great vitality, of immense endurance. Another stream of miscegenation relapsed into savagery, but a craftier, less ignorant savagery. Between these two strata was the ever-increasing race of half-castes, who took wives of mixed blood, and regarded the whites as their feudal lords. In the end the race would probably have split roughly into three parts; there would have been a European ruling race, a subservient Indian race, and a middle class of half-castes, able to act as stewards, inferior officers, traders, overseers, &c., constantly recruited by the offspring of slave-women, and constantly recruiting the white race from below; a state of affairs that would have made for national stability and a firmly established aristocracy.

From every point of view but one the step taken by the Jesuits was excusable. The friendly Indians had

become insufficient to the greed of the increasing class of settlers, or were no longer friendly; slave-raiding expeditions were commencing with San Paolo as a centre; they were conducted with ferocious cruelty, and seemed likely to end in the extermination of the tribes. But laws protecting the Indians and a skilful trading policy might have satisfied both parties, while doing less ultimate harm. Once the edict was enforced only a few domesticated Indians continued to labour. The Brazilians sought for negro slaves; they opened the slave-traffic in 1574; about which time Brazil was divided into two Governments. The negroes were imported principally into Bahia. The trade lasted three centuries. Few women were brought at the outset; but this state of affairs did not last long, though in some districts the negroes took Indian wives. The result was the production of a Bahian race in which few have escaped the contagion of mixed Indian and negro blood. Being utterly ignorant of the country, and of how to live in it, the negroes seldom attempted to escape from the sugar-fields; since their recent enfranchisement they have continued to live on the cane plantations (although they entirely deserted the coffee plantations, where the work was harder and more regular), working only a few days a week, and spending their earnings in drunkenness. Here was an element introduced which could neither attain savage perfection nor rise to civilisation.

About this time the Parahyba country to the north of Pernambuco was conquered, and the Indians expelled.

Hitherto Bahia had not been greatly exercised in the matter of self-defence. She was now to undergo an experience which was to teach her people patriotism, and knit them together as a nation. In 1578 Sebastião, King of Portugal, was killed at the battle of Alcazar al-Kebir



AVENIDA DO MANGUE, RIO.



in Africa. Two years later Philip II. of Spain annexed Portugal and laid claim to her colonies.

The Governor of Bahia had perforce to accept the oath of allegiance to the new monarch.

The attacks of the Spaniards, which in certain quarters had troubled Brazil for years, immediately ceased. The greater part of Brazil had an opportunity of self-development and expansion ; the colonial period established itself on a firmer basis.

But England, France, and Holland, all hostile to Spain, then at the height of her power, considered her colonies fair game. The French delivered attacks all down the coast of Brazil, continuing them until 1607. In 1583 an English fleet ravaged the port of Santos ; in 1587 Witherington laid waste the country around Bahia ; in 1591 Santos was sacked again ; in 1595 the French and English captured Pernambuco. In 1599 the Dutch attempted the bay of Rio, and were beaten off Bahia.

At this period, according to Father Anchieta—the most famous of the Jesuit missionaries—the white population of Brazil was only 25,000 ; there were also 29,000 “civilised” Indians and 13,000 negro slaves. In Bahia (apparently the city and the neighbourhood) were 2,000 whites, 4,000 slaves, and 6,000 Indians ; there were forty sugar-mills, and many cattle. Bahia was still the capital of all Brazil, the seat of supreme justice, and the only bishopric.

For the next forty years the country steadily developed. Some captaincies, it is true, were always at war with the Indians ; others were annihilated, or barely held their own ; while others expanded their territory by conquest ; but the two Royal Captaincies were to a great extent the defence they professed to be, and the evolution of the Brazilian nation proceeded on natural lines. For centuries the strong man of his hands had been the

survivor ; the strong, the crafty, and the brave were survivors still.

At last, in 1600, the Indian legends of gold and jewels began to attract attention, and that search for treasure began which led, after years of incredible privation and fearful bloodshed, to the settlement of Minas Geraes, the central mountain province of Brazil (*q.v.*). The first expedition started from Bahia. A small party might have lived on game, but must have been quickly captured or massacred ; a large party could neither live on game nor carry the provisions needful for so long a journey. The early expeditions were forced to form agricultural outposts, as a man seeking the Poles makes *cache* after *cache* of meat ; they were frequently absent for years. For nearly two centuries these expeditions continued, at first ascending the river-valleys of Bahia ; and the lust of gold brought a fresh invasion of Portuguese, and men indeed of many European nations (some of whom brought their wives) ; and eventually settled in Minas or Bahia, unless they returned home.

In 1604 a Dutch fleet attacked Bahia, but was beaten off. In 1610 the French were expelled from Rio Grande do Norte and the Amazon.

Matters were moderately quiet until 1621. Then the Dutch Government, which had for some time had its eye upon the Amazon, granted a charter to the Dutch West India Company, assigning to it the whole of South America and also parts of Africa. This charter promised the rights of conquest and a monopoly for twenty-four years.

In 1624, when Brazil was divided into the two Vice-royalties of Maranhão and Brazil, a fleet of twenty-six Dutch vessels, bearing five hundred cannon and more than three thousand men, sailed into the Bay of Todos os Santos, destroyed or took the Portuguese vessels, and

captured the city of Bahia. The half-breeds and Portuguese, being expelled or fugitives, kept up an irregular siege, in the course of which the Dutch Governor was killed. In 1625 a fleet from Lisbon, manned by Spaniards and Portuguese, forced the Dutch to evacuate the city.

Five years later a third attempt on the part of the Dutch was only too successful ; the whole coast was seized from Porto Calvo to Rio Grande do Norte. A regular Government or "Political Council" was established, and Prince Maurice of Nassau, who arrived seven years later with 2,700 troops, was appointed President. He explored and annexed Ceará ; and in 1638 attacked and captured Bahia. A few months later he was forced to retire, having lost two thousand men.

Next year a Portuguese fleet of no less than ninety sail was partly destroyed in a storm, and afterwards defeated. The survivors reached Bahia after an historic march.

In 1640 Portugal regained her independence, the insolence of the ministers of Philip IV. having at length caused a revolt ; and the crown was bestowed on the house of Braganza. Bahia was raised to a Viceroyalty. The Viceroy, Montalvão, arranged an armistice with the Dutch.

With the separation of Brazil from Spain the Dutch had no longer the same interest in attacking the colony. Prince Maurice left the country in 1643 ; the Portuguese, who had retired to the interior, took up arms with determination, and after twelve years of irregular warfare the Dutch were expelled from the country.

Under the Dutch occupation Pernambuco was developed ; other results were a further settlement of the coast, a slight infusion of Dutch blood, and some traces of Dutch architecture in the northern provinces.

We may draw one conclusion from the fierce and

tenacious conflict with the Dutch : that the Brazilians, for so we may now call them, were no longer Portuguese exiles and adventurers, but truly Brazilians, with a deeply rooted love of their land at heart ; not yet a love of Brazil so much as a love of their captaincy, their village, their lands and pastures.

In 1649 a *Junta do Commercio* was created in Lisbon, to protect Portuguese trade with Lisbon against the Dutch. This Junta degenerated into a monopoly of Portuguese trade, which was broken only upon the advent of João VI. in the nineteenth century.

This monopoly has been significant in the development of Brazil. Portugal was a backward civilisation, and was now decaying as Brazil developed ; so that her exports had little or no civilising effect on Brazilian life. Her demands from Brazil were few in number, so that the country depended entirely on a few industries.

During the following years townships were founded in the interior ; the hinterland was further explored ; and *mamelucos*, or Paulista half-breeds, were called in to destroy a " negro republic," or rather a democracy of outlaws and fugitives ; they also seized upon the remoter portions of Piauh, and many settled in the north.

In 1686 yellow fever was introduced ; a pestilence which had its effect upon the race. Fevers, as a rule, do not select the weakly so especially as to improve a race ; but the yellow fever, bred of dirt and slavery, has undoubtedly, by sweeping away the inhabitants of abominable urban stews, and by decimating those who could not afford to fly from it, gone far to reduce the more brutish classes. It has also finally awakened the Brazilians to the necessity of hygiene and an up-to-date medical faculty ; Brazil has now even a seropathic institute. Some of the epidemics were truly terrible ; I have met sailors who have told me of Rio harbour, in the sixties,

full of ships of all nations, and among all those hundreds of ships only a dozen or so of living men ; and those mostly panic-stricken watchmen. Of comparatively late years the death-rate in certain cities was enormous, and there was an annual exodus of all the wealthier inhabitants. Many other tropical diseases were rife. Some have improved the race by destroying the unfit ; some appear to have acclimatised the race by conferring certain immunities.

In 1694 a mint was founded.

During the following century little occurred of historical moment, excepting the expulsion of the Jesuits, which followed upon their expulsion from Portugal. Their "reductions" had a civilising effect ; their policy with the Indians was invaluable ; but the planters of Brazil—for Brazil by now was a country of planters or ranchers—looked with envy upon their domesticated Indians, and resented their interference.

In 1763 the Viceregal Government was removed to Rio.

In 1806 there was a revolt on the part of the slaves.

In the same year the colonial period came to an end with the arrival of the Regent of Portugal, who was flying from Napoleon.

We will now glance briefly at the development of San Paolo, Rio, and Minas, and sum up the evolution of the nation up to the end of the eighteenth century, when we must consider the second period—that of the Empire.

SAN PAOLO.

A Paulista has said that the history of San Paolo is the history of Brazil. Most accounts of San Paolo begin with this remark. It is not correct ; the early Brazil was fated to stand or fall with Bahia. But

the early Paulistas, both white and half-breed, were endowed with an extraordinary spirit of wandering unrest and of conquest, and with qualities of ferocity and endurance which made them terrible to their enemies, and led to the settlement of many inland regions. North, west, and south they went; north to Piauh, south to the Rio de la Plata, west to Cuyaba; and for generations they struggled for the mines of the Mantiqueira.

Much has been said of the cruelty and ferocity of the *mamelucos*. We may take that to mean that they were warlike and acquisitive, and fought savage enemies. All men were fierce and cruel in the sixteenth century, as most robust unlettered men would be now, except for the police. I do not suppose that a Congo official is more humane than a *mameluco*; nor a Cossack, nor a member of the Russian "aristocracy." It is true that the Latins are exceedingly frank about their cruelty; they are not ashamed of it, in certain forms. An Anglo-Saxon mob can be vile enough when the spirit of panic revenge is upon it; but the Latin mob can sit down quietly in its thousands to enjoy several hours of particularly sordid brutality. Doubtless the Anglo-Saxon could do the same if public opinion approved. For panic is only a sudden change of public opinion. Cruelty is part of the instinct of self-defence, and only disappears under the influence of public opinion and of culture; is restrained only by imagination and the conscious love of living beauty.

The Portuguese who settled Brazil were mediæval knights and men-at-arms; the Indians with whom they came in contact were mostly cannibals, and were given to torturing prisoners. The settlers and half-castes carried out reprisals much as the settlers of the United States revenged themselves upon the hostile Indians within living memory. War was meant to exterminate. These were virile men at the height of physical evolution; the

natural selection of battle, feud, and hardship had not left room for the degeneration of a random civilisation. They were as brave and fierce and cruel as were Drake, Hawkins, Witherington, Raleigh, and other of our national heroes.

At Cananea, south of modern Santos, the fleet dispatched from Portugal to delimit the *capitaneas* came to an anchor in 1531. At Bahia, earlier in the voyage, Affonso, as we have seen, discovered one Correia, living among the tribes as a patriarch. Here, by an equally fortunate chance, he found another Portuguese, one João Ramalho, who had married the daughter of Tibyriça, the powerful *caçique* of the sea-coast Indians. Like his compatriot further north, he was great in the councils of the tribes, and assured Affonso of a friendly welcome. From the relations between Ramalho and the Portuguese adventurers and the women of the friendly tribes sprang the famous *mamelucos*, the half-breeds terrible in war, who overran Brazil, conquering and settling, provided her planters with slaves, and preserved the little nation from destruction in the rear while all its resources were strained to the utmost in repulsing its enemies from the sea. The progeny of Ramalho was apparently numerous, for it was from him that the *mamelucos* claimed descent. For his manifold services the King granted him the lands which were already his. Ramalho was chief of a village in the centre of these lands, which lay near the borders of the forest; the Portuguese commander built a township adjoining it, calling the whole São André. This township was afterwards to become San Paolo.

Like the settlements in the north, the new settlement had to fight for its life. Spanish fugitives from the south burned and sacked the fortified station of São Vicente upon the coast; Cavendish did so a little later; while the Tamoy Indians, who lorded it in the plateau, descended

and attacked the settlers at intervals for many years, devouring their captives—a terrible fate for a good Catholic. But by 1563 they were so far weakened as to be partly “reduced” by Anchieta. Years before in 1536, certain lands were granted to one Braz Cubas ; in 1547 he erected upon them a hospital and a chapel. The settlement was not inappropriately given the name of Santos. Before the hospital was completed the settlement was created a township.

Two years later Thomé de Sousa, the Governor-General from Bahia, visited São Vicente and São André, and forbade the Spaniards to travel over Portuguese territory on their way to Paraguay.

In 1553 Anchieta and his band of Jesuits arrived. The Jesuits protected the Indians from enslavement, at the same time instituting a modified slavery of their own. They founded their first station near São André, calling it São Paolo.

As in the north, the patriarchal system of morality offended them. Whether jealous of Ramalho's town, or shocked by the miscegenation which was creating Brazil, they persuaded Mem de Sá, the next Governor-General, to raze it to the ground ; an act of foolish arrogance which exposed them to charges of ingratitude and feelings of suspicion and hatred : the feeling against them culminated first in raids upon their outlying “reductions,” and finally in their expulsion.

In 1560 Santos and São Vicente reinforced an expedition under Mem de Sá, which finally drove the French from Rio.

The Jesuits, perhaps to regain some part of their lost popularity, constructed a road between Santos and San Paolo, which for three centuries was the main outlet from the State.

About the same period Mem de Sá sent the first expe-



PRAÇA CABRAL, RIO.



dition from San Paolo up the Tieté, in search of the gold-mines of which the Indians had spoken.

Then the peace with the Indians of the seaboard and the nearer forests was broken. Under less severe discipline than at Bahia, the settlers waxed fat and kicked; glad enough at the outset to find the Indians friendly, they presently, like the followers of the unhappy Coutinho, commenced to tyrannise over them, to regard them as beasts of burden, appointed by Providence to be slaves. In 1580, when both white and Indians were thickly settled round San Paolo, the Indians of a sudden withdrew, forming villages of their own, took up arms under a brother of Tybiriça, and assaulted San Paolo. Tybiriça and his followers remained loyal to the whites; the Jesuits had entrenched their position, and the attacking force was driven back to the forests. A year later Tybiriça died; to whose aid, with that of Ramalho, the Portuguese owed their footing in the country.

As long as their large plantations were being cultivated by the "domesticated" Indians, the Portuguese settlers found themselves free for further conquest or adventure; while the race of *mamelucos* seconded or even excelled their efforts. Their prosperity, however, was not unchecked; small-pox devastated the tribes; the soil went fallow for lack of hands; famine ensued, which meant that the Indians flocked to the Jesuit "reductions."

Indians still continued to attack the settlers to the south of São Vicente. Albuquerque, an eminent Captain-General, pursued them, and finally came out upon the Laguna dos Patos, where he founded the settlement of Laguna. The *campos* of the coast were already rich in cattle, which had strayed from the Spanish settlements of La Plata. These plains were later conquered by the Paulistas, and were the scene of the final struggle between the Spanish and the Portuguese.

In 1608 the country was divided into two Governments, and the *capitaneas* of Espiritu Santo, Rio de Janeiro, and São Vicente were included in the southern Government.

At length labour was almost monopolised by the Jesuits. They treated the Indians mildly, and their increasing power and affluence aroused the envy of the colonists.

These latter, of whom many were impoverished, and the energetic, adventurous half- and quarter-breeds, began to give ear to rumours of gold.*

The surroundings of San Paolo being swept bare of Indians by pestilence, famine, and the Jesuits, the *mamelucos* of the seed of Ramalho and the tribe of Tybiriça recommenced their series of raids in search of slaves. The first raid was effected in 1562. About one thousand *mamelucos* and two thousand Tapoy Indians set out to raid the Jesuit missions of Guayara. There were fourteen Jesuit colonies around the confluence of the Piquery and the Paraná, as well as a flourishing town—Ciudad Real. By 1634 neither town nor missions remained. So many slaves were captured by the raiders (henceforth known as *bandeirantes*) that a yearly slave market was held in San Paolo. The Jesuits collected the remnants of their tribes and moved further afield, only to be raided once more.

The result of these raids was that the Indians began to fight shy of the missions. In 1640 the Jesuits received a second edict, like that which in 1570 affected Bahia,

* It is said that the mass of the population of São André counted their descent from Ramalho. When the town was destroyed by the wiles of the Jesuits, they went to live in San Paolo, but lived apart from the other inhabitants, nursing their wrongs. Hence, no doubt, their readiness for adventure, and their practical extermination of the Jesuits at a later date. [TRANS.]

which emancipated all Indians from slavery. This was too much for the planters to endure, and the Jesuits had to escape from the country. A Royal decree of 1653 enabled some of them to return ; but in 1758 they were finally expelled from the whole of San Paolo.

In 1641, when Brazil was once more united to Portugal, the slave-raids recommenced, the trade having slackened during the Dutch occupation; but the first expedition, venturing into Paraguay, fell into an ambush after making many captives, losing all their prisoners and nearly a third of their strength, who were devoured by the allies of the Jesuits. This disaster was bitterly avenged ; the missions and villages of Paraguay were laid waste, and Chaco was invaded; but the expedition was a failure as regarded the capture of slaves, so the hunting-ground was changed.

In 1658 Rio and São Vicente were separated. The Paulistas, more than ever an independent people, began a movement of expansion northward ; and in 1678 made great discoveries of gold in the Rio dos Velhaes district, now part of the State of Minas.

Raposo, the leader of the *bandeirantes* who had destroyed the missions of Guayará, crossed the Andes to the Pacific, wandered for years exploring the interior, and returned to San Paolo, having twice crossed the continent.

In 1673 a band of Paulista half-breeds was engaged by the Bahians to subdue a tribe of Indians whom the Bahians were unable to cope with. Another band explored Piauhys and broke up the " negro republic " of Palmeiras (*vide* Bahia).

Then the Paulistas began to pour northwards a series of expeditions: seeking gold, founding settlements, and clearing the forests. The news of gold attracted a new stream of European immigrants as well as Brazilians

from the coast. Portugal was already descending into a condition of pitiable decadence ; the new drain on her population, while it relieved her of a number of undesirables, also brought a further stock of adventurers of pure Portuguese blood to reinforce the Brazilian race. Gold-seekers, some with their families, came by every ship, introducing a strain of female Portuguese blood.

The Paulistas, as discoverers, claimed priority over a great part of the mining region ; the newcomers had the Portuguese Government behind them. At last, after a pitched battle, the redoubtable Paulistas were defeated, and retired to San Paolo. They returned to the attack, as we shall presently see, but Minas was finally taken over by the Government and created a separate captaincy.

In 1681 San Paolo was made the capital of the *capitanea* of São Vicente, and the latter was separated from that of Rio.

In 1718 the Paulistas, for ever exploring, came upon the alluvial deposits of the Cuyabá. Then followed a gold boom, like the rush to California or to the Yukon, which ended in the occupation and separation of Matto Grosso and Goyaz.

During the rest of the century the chief incidents were the expulsion of Spanish invaders from Rio Grande do Sul in 1739 ; the annexation of San Paolo to Rio in 1750 ; the emancipation of Indian slaves by Dom José in 1758 ; and the exploration of outlying regions between 1769 and 1776. In 1775 Brazil was once more united under the Government of Rio.

The wealth of San Paolo was now upon the wane. Such surface mines as remained in the hands of the Paulistas were soon exhausted by the primitive, wasteful methods of extraction ; the wars with the Indians had left the labour market almost empty ; and although a

new Governor, who arrived in 1788, did his best to improve matters, the recovery was only temporary.

It must be remembered that not only was every *capitanea* forced to confine its import and export trade entirely to Lisbon and Oporto, but transport was confined to Portuguese vessels, and all commerce was effected through the agency of favoured monopolists. Moreover, there was no trade between one *capitanea* and another. Always exploited to sate the greed of courtiers and monopolists, now that the population of the country had so greatly increased, while San Paolo had lost its temporary possession of the mines, the whole country began to feel the pinch, but San Paolo in particular. For a short time the monstrous monopoly of trade was suspended, but in 1802 it was again reinforced.

It is not wonderful that the success of the French and American revolutions raised a revolutionary party in Brazil; the remarkable thing is that the movement was not general. Groaning under heavy taxes, robbed by a monopoly, paying heavy tribute on the mines, Brazil had everything to gain by freedom. But the printing-press was still forbidden; nearly the whole population was illiterate; communications were bad or practically non-existent. In 1789 a young officer named Xavier, but known as Tiradentes—the Toothpuller—headed a republican conspiracy; but the revolt miscarried and Tiradentes was executed.

At the close of the eighteenth century San Paolo had a history of nearly three centuries: three centuries of constant agricultural and pastoral expansion, during which the Paulistas were practically an independent conquering race. The *mamelucos* had settled in all parts of Brazil, thus decreasing their possibly dangerous preponderance in San Paolo.

During these three centuries, to sum up the factors bearing upon the creation of the nation, a large population of whites had concentrated around San Paolo, cultivating the land by means of slave labour, first Indian and then negro; while the *mamelucos* had settled, or led to the settling of, a great part of Brazil. The white population was the seed of the hardiest adventurers of Portugal, who were left impoverished or unemployed or otherwise disturbed by the break-down of the feudal system, reinforced by a strain of even more hardy Indian blood; the *mamelucos* inherited all the ferocious bellicosity of the Indians, with the superior brain-power of the whites. Welded together into a people of feudal constitution, they played a prominent part in the conquest of Brazil, and had they retained possession of the mines might have conquered the rest of the country or have assumed independence. Gradually the plateau and the richer soils fell into the hands of white settlers, while the poorer *mamelucos* went further afield. Of the progress of San Paolo in the nineteenth century we shall deal briefly in the section dealing with the Empire.

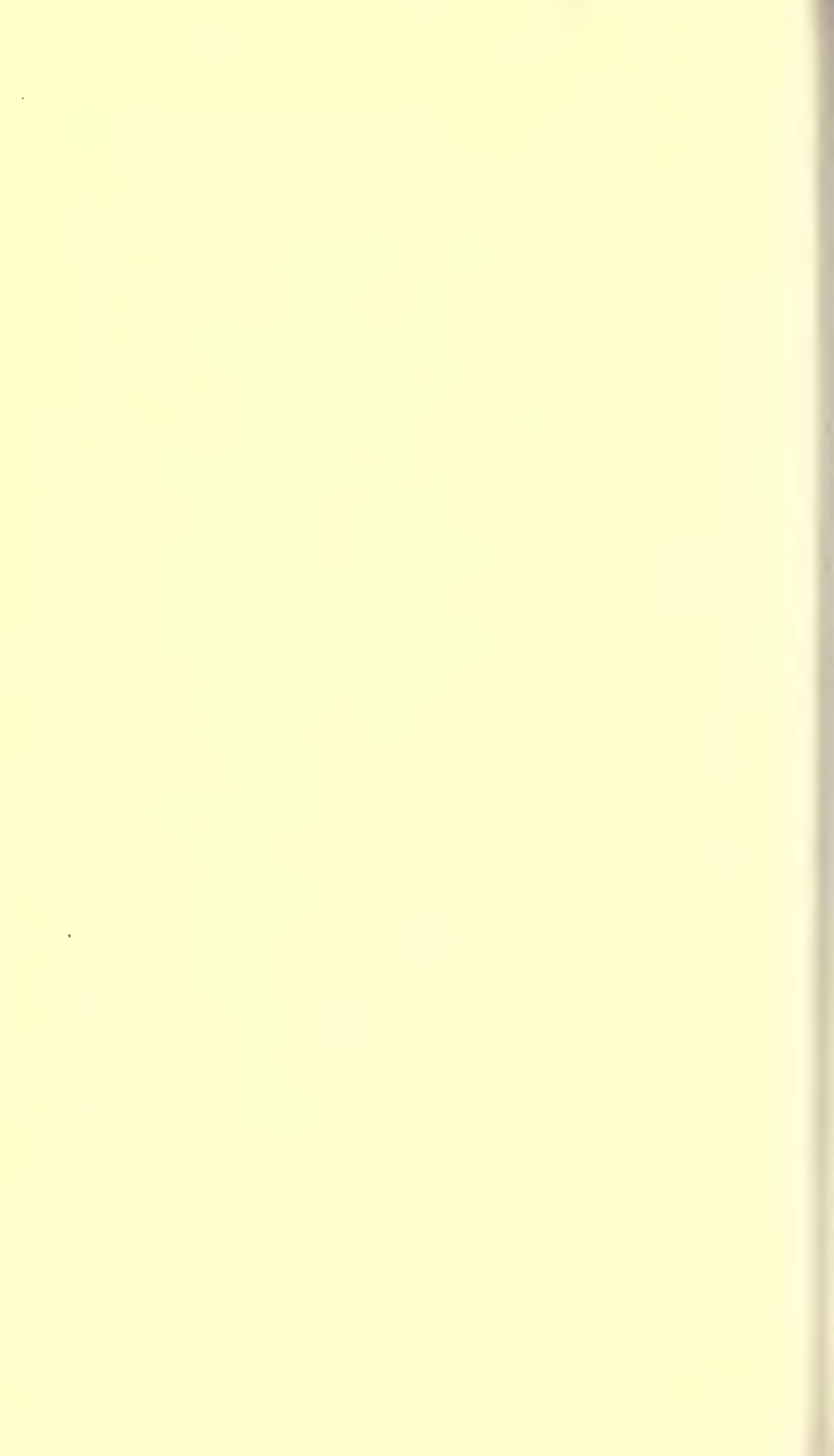
RIO DE JANEIRO.

The bay of Rio was first entered on the 1st of January, 1502, by a fleet commanded by Gonzalo Coelho. As it had all the appearance of an estuary, and a certain flow of tide, Coelho misnamed the harbour the River of January—Rio de Janeiro. It is a magnificent natural harbour of wonderful beauty. In 1502 the shores were peopled by warlike Indians, and the site of the present city was occupied by a mangrove swamp.

Coelho sailed away without attempting to ascend the supposed river. Seventeen years later Magellan anchored



PRAÇA TIRADENTES, RIO.



there for a fortnight. In 1531 the French took possession of the bay. Affonso de Sousa, during his voyage of delimitation, drove them out, selected the bay as the seat of his own captaincy, and erected a small fort. But Rio languished, closely hemmed in by mountain and forest, while San Paolo, with its access to the plateau, rapidly developed. The French returned to the attack again and again, and in 1555 one Villegaignon, a French adventurer or "corsair," set out from France with many shiploads of Huguenots, intending to form a colony. Seizing the bay and fortifying it, he awaited events. Five years passed; then Mem de Sá attacked the bay, silenced the forts, and drove the French inland. They took refuge with Indian allies—their policy with the Indians was usually successful—in the fort built by Affonso. Five years later Eustacio de Sá arrived with another fleet from Portugal, to find the bay so strongly defended that he dared not enter. Landing on the mainland westward of the bay, he founded a fortified town, the nucleus of the modern Rio. For three years incessant war was waged; the French fighting side by side with their local allies, the Portuguese with Tupus from São Vicente. In 1567 Mem de Sá came to Eustacio's assistance; the latter was killed in an engagement which resulted in the utter defeat of the French, who fled inland, and for years kept up a guerilla warfare. It is interesting to note that Rio has always been the literary capital of Brazil, and a more cultured centre than San Paolo; which may be due principally to the fact that Rio was for a long time the seat of a little court, but partly to an infusion of French blood.

Mem de Sá transferred the settlement to a better strategical position. There he left, as Captain-General, his nephew Correia de Sá, who died, after a long administration, at the age of 113.

In 1608 the captaincy was raised to the status of a Government, including Espiritu Santo, Rio, and San Paolo. The city counted 2,500 inhabitants and a garrison of six hundred soldiers.

Not until 1710 did the French return. Duclerc landed and took the town, but in a certain street the citizens and students (for a Catholic college, hospitals, and convents had been erected by the official Governors) resisted the invaders to such effect that they capitulated. Duclerc was assassinated some months later, and another expedition sailed from France. This defeated the Portuguese fleet, (which seems not to have fought with much credit), and was itself bought off by the Brazilians.

In 1762 Rio was created capital of all Brazil, and Bobadella, the Governor, was raised to the rank of Viceroy. He built an aqueduct supplying the town with water, which now serves as an elevated tramway.

Rio, as we see, was of more importance as a naval station and a city than as the capital of a surrounding State. For a long time the interior was largely hostile; full of Indians, and a few French and half-breed refugees or settlers. At the end of the colonial period Rio was a city of some size and dignity. Its inhabitants were largely Portuguese of pure race, and considering that it was Portuguese, and what Portugal herself was at that time, the society was cultured and agreeable. The city contained fifty-six streets, nineteen open squares, a theatre, an Archbishop's Palace, a Government Palace, a college, a military hospital, two forts, a customs house, and arsenal, and thirty-four churches or convents. It was a civilised capital, if not a very enlightened one; ready for the better times that were soon to follow.

MINAS.

The development of Minas by Bahians, Paulistas, and Portuguese has already been mentioned, but the formation of its population deserves further explanation.

The history of Minas, if fully written, would fill many volumes. With its wealth of incident, it is almost impossible to condense in true perspective; one can only seek to give those facts that led to the settlement of its population, and its effect upon other populations.

Bounded to the north by Bahia, to the east by Bahia, Espiritu Santo, and Rio, and to the south by San Paolo, Minas Geraes covers the higher portions of the central plateau. Five great river-valleys descend from its highest point. Roughly speaking, the State consists of two plateaux: one of forest-land, and a higher one of scrub or *campos*. The Mantiqueira, the ramifications of which fill a great part of the State, rises to a maximum of 10,400 feet.

The settlement of Minas was not official; indeed, there were no settlers at the outset, but only expeditions of prospectors, many of whom perished by famine or at the hands of the Indians. A small expedition might live by hunting, but was practically certain to be destroyed or cut up by the Indians; while a large expedition could not live by game, as the attempts of a number of hunters to penetrate the dense forests would have alarmed such animals as had not already been disturbed by the sound of a large body of heavily accoutred men marching or tracking a laborious trail.

Only the very hardy reached the mines during the earlier period of their development. The mines were discovered and exploited by bands of private adventurers, many of whom were half-castes.

We have seen that Caramurú, as a leader of his own

adopted tribe, had relations with many tribes; and it is said that a son of his was guided to a mine by the Indians.

Once Bahia, San Paolo, and Rio became settled, and the planters had slaves and half-breeds in abundance to work and overlook their plantations, men eagerly lent ear to the Indians' tales of wealth. Near Bahia was a tribe whom Cabral had encountered, who were driven from their inland plateaux by a tribe of cannibals. They wanted the white man to expel the invaders, and with that end in view perhaps coloured their stories. The news reaching Lisbon, a new Governor came out who was primed with legends of El Dorado. A route was discovered up a river-valley, which led to the country indicated. Gradually, during the course of many years, the route became fairly practicable; the earlier expeditions were often attacked by Indians, but most of them found alluvial gold.

During the Spanish domination and the Dutch occupation little was done to develop the mines from Bahia; the tribes were too powerful for small expeditions.

Finally, one Jacques, a wealthy soldier, and the founder of Taubaté, then an outpost of San Paolo, set out from the south, crossed the Mantiqueira, and prospected in the Rio Verde highlands. These two trails—one from the north and one from the south, and both up river valleys—were used for many years. The extermination of cannibal tribes was presently to open other routes.

At this time the coloured people of San Paolo, the *mamelucos*, were at a check; in slave-raiding, in raids of extermination, in exploration and settlement, they were for many reasons less active than of old. They sighed for new conquests. One Diaz, who had enslaved a tribe and was cultivating vast estates on the Tieté by

means of its labour, fitted out a large expedition. The Crown gave him permission to search for the fabulous mines; for his relations with the nobles and Indians alike gave him a formidable influence in the colony. He formed two agricultural settlements as bases of supply, and after two years emerged with a handful of his men, at Anhanhohucuhura. Most of his Indians had deserted or died of privation; but Diaz declined to return, sending back to San Paolo for supplies. A bastard son conspired to kill him, and was hanged. While waiting, Diaz commenced to grow crops at a central point, and prospected the surrounding highlands. He at last reached a legendary lake, but then, provisions being exhausted, returned, leaving a small body of men as a guard. He died of fever upon the return journey. A faithful remnant remained and continued to prospect.

Certain large green tourmalines (which were for a long time regarded as emeralds) had been sent down to San Paolo and forwarded to Lisbon. An expedition was at once dispatched on the pretext of relieving Diaz; in reality, it was to seize the lake for the Crown. But Diaz was dead; Borba Gatto, his son-in-law, who remained in charge of the lake, knew no law but his own. Castel Branco, the leader from Portugal, was treated as a usurper, then killed in a quarrel.

Murder was nothing; but the murdered man had been the King's friend. The blow that smote him struck feudal Portugal; it outlawed Borba Gatto and all his following. Gatto's followers fled; he also, to his own lands. Branco's expedition melted away; the armed half-breeds wandered into the forest, taking the cattle, the tools, the implements of civilisation; taking also their own half-knowledge of civilisation. A generation later they were owners of great herds of cattle, living a semi-civilised existence as *sertanejos*. Dread of feudal punish-

ment, memories of feudal rule ; the nervous hatred that fills a deserter : these made the distant settlers distrustful, shy of showing themselves, wary or fierce with strangers. When at last the struggle for Minas began they fought for the Bahians, the Portuguese strangers, rather than for their own race. When the country was finally pacified their distrust of their former overlords passed into a conservatism, a hostility towards all things unfamiliar, that characterises this people even to the present day, as it marks many of the inland coloured peoples. The negroes have no such feeling ; they never in Brazil knew freedom or the backwoods ; they trusted the whites, and in a puerile way were eager for new things.

During the next thirty years many expeditions followed ; but few to much purpose. But gold was at length found at Ouro Preto and Ribeiraon Carmo. Also the Governor of San Paolo pardoned Borba Gatto—who, guarded by his Indian subjects, lived hidden deep in the forests. Put in command of an expedition, he undertook a thorough exploration, and by the time the Governor had followed he had prospected and was exploiting the alluvial deposits of half a dozen rivers.

This journey from San Paolo was still perilous, and a matter of three months ; but an Indian trail was at length discovered by which the coast could be reached within a fortnight.

By this time the Bahian route was at length safe and practicable. Bahians and Portuguese poured into the valleys ; a fresh tide of Portuguese blood was flowing toward Brazil. The few Paulistas, who had painfully penetrated the country and opened the mines, at the cost of untold bloodshed and privation, claimed a monopoly of their alluvial deposits, and indeed of all mines whether known or undiscovered ; but a Royal decree of

1694 gave all mines of gold and silver to the finder, who by paying a fifth to the Crown could become a noble.

Six years later ingress from Bahia was forbidden. This was apparently all in favour of the Paulistas ; but one short route from the coast was discovered, and by that and the route from Rio the rush of gold-seekers continued for many years ; a rush that must be counted with the great gold "booms" of history ; a rush of Brazilians, Portuguese, and foreigners of every nation, of every colour, from every region, of all callings. The Paulistas tried to enforce their rights of monopoly as discoverers ; the Bahians and the Portuguese joined hands to oppose them. After seven years of bloody encounters numbers told, and the Paulistas were driven out.

The miners, hoping to keep the peace and avoid interruption at their work, had found a leader, Nunez, a self-made man of wealth ; firm, but a lover of peace. He was given supreme power as dictator of the mines. But he could not suppress bloodshed ; and finally three hundred Paulistas were massacred after surrender, at Rio dos Mortes.

The Governor at Rio, hearing of the prevailing state of anarchy, sent up an official Governor ; but he was forced to retire. The Court at Lisbon, in the meantime, was receiving large consignments of gold. It sent out another Governor, with instructions to use his power with diplomacy. He pardoned Nunez and his lieutenants, on the condition of their retirement from public life.

Meanwhile the news of the massacre of the three hundred reached San Paolo. Few families had not lost some relative. An expedition of revindication set out. The Governor, hearing of its coming, hastened to meet it. Unable to turn the Paulistas from their purpose by persuasion, he hastened to Rio and sent out a force in

support of the opposite party. The Paulistas were defeated and driven to take refuge in the forests. They at last gave up the unequal fight and returned to more peaceful and normal avocations.

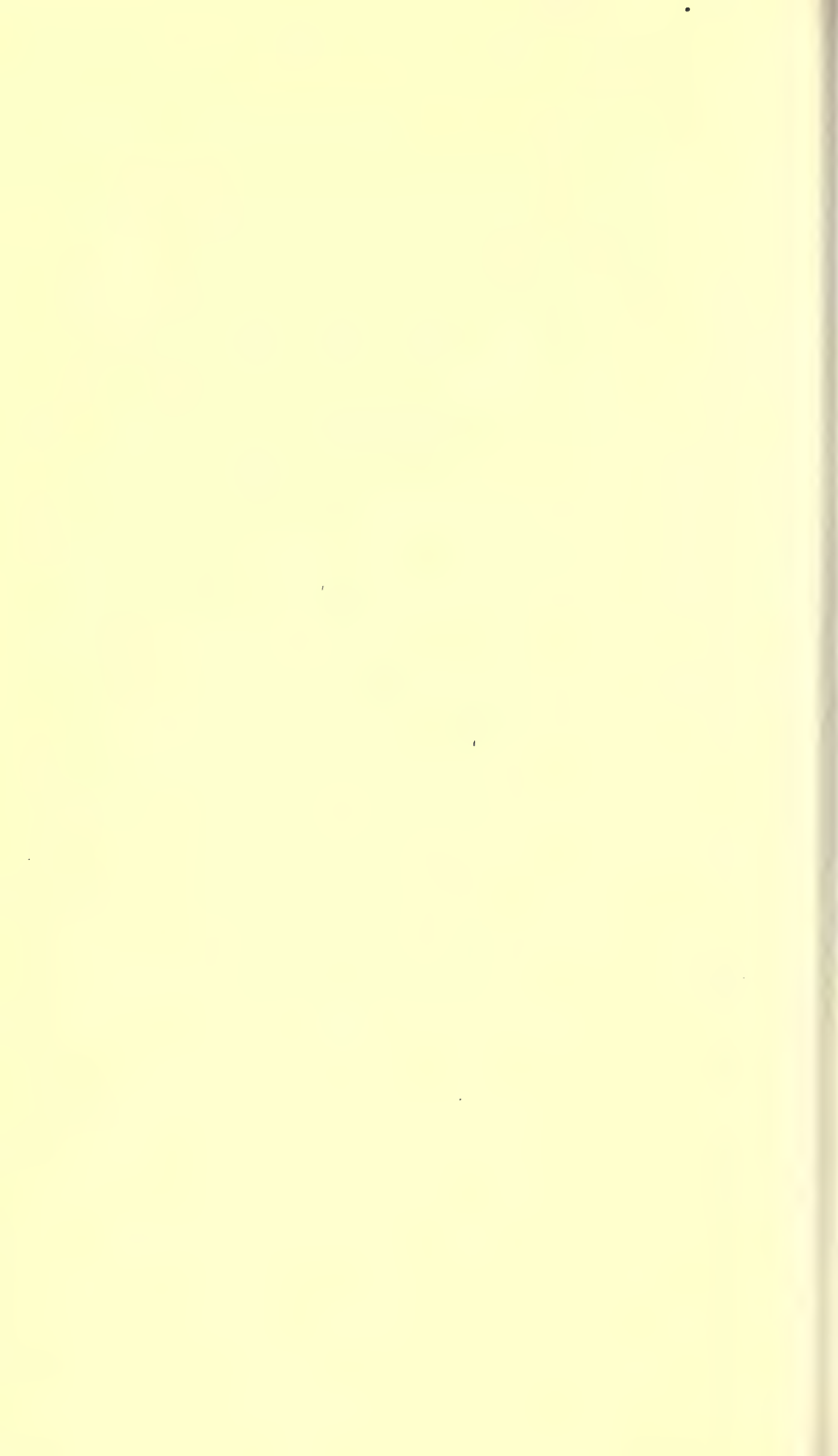
Albuquerque, the Governor, in the hope of establishing some lasting control, now divided the mining country into three regions, with three capitals. These capitals, Ouro Preto (then Villa Rica), Ribeirão do Carmo, and Sabará, were seats of justice and autonomous government. Albuquerque retained the supreme power as commander of San Paulo, Minas, and Rio.

In 1713 his successor arrived, Marshal Silveira, who brought with him his wife. He continued the work of pacification commenced by his successor. Minas was then a hell on earth; an abandoned priesthood setting the example in every department of villainy and debauchery. Silveira resided at Ribeirão Carmo, and with his wife and followers had a lasting effect for good upon the manners of the country. But his authority was only a pretence; there was no grip of steel beneath the silken glove. No measure could be executed against the will of the priests or the mine-owners. Worst of all in licence and violence were the Portuguese, who came with armies of negro slaves. It may seem astonishing that the Portuguese attained a blacker reputation than the natives, with their strain of Indian blood; but an examination of the history of Portugal during this lamentable period of her decadence will remove all feeling of surprise.

Such was the brutality of the Portuguese that the following Governor suggested to the King that every negro slave should have his right leg removed, being given a wooden one to work with; otherwise the white masters would hardly be safe in their midst, so inhumanely did they drive their slaves. Such a method was already em-



AVENIDA BEIRA-MAR, RIO.



ployed in the Portuguese dominions on the Mississippi. It was not introduced to Minas ; but a rule giving each slave one day of freedom in the week was rescinded, as it was feared that too many might live to buy their freedom by the money earned on such days of liberty. This action was followed by a revolt on the part of the slaves, after which they were treated with greater severity. At this time there were some 35,000 slaves in the mines ; most of whom were recently captured.

In 1721 the same Governor, d' Assumar, was recalled, being accused of a partiality for the Brazilian miners. The truth is probably that he was forced, in order to keep any semblance of order, to use one party against another. The maintenance of law was in reality an impossible task ; each party in turn gained the ascendancy. Order was beyond the power of any man without an army behind his back. All parties were seditious, but especially the Portuguese. In spite of his difficulties and his fall from favour, it was the Conde d' Assumar who finally laid the foundations of civilisation in Minas.

Had the Paulistas retained the State the process of administrative settlement might have been effected with greater ease ; but with Minas in their hands the Paulistas might have become a separate and impregnable nation, to the loss or danger of the rest of Brazil.

As the surface of the alluvial workings became exhausted by wasteful methods, a great part of the population was gradually absorbed by agriculture and stock-raising. The remnants and the leavings of many expeditions had also retired to the *sertaon*. During the nineteenth century the mining activities of Minas were not very notable ; although it was discovered that the alluvial deposits had been merely scratched on the surface. A number of English companies obtained concessions and at great expense installed modern

machinery ; some of these companies are still working. There will probably be a great renaissance of mining in the near future ; the "difficulty" of obtaining concessions is rapidly becoming a less serious obstacle under better Governments, and the tariff on machinery has been greatly reduced. Diamonds, once the property of the Crown, are still mined around Diamantina, though the rise of the De Beers mines injured this industry for a time.

Healthy, fertile, and picturesque, with a beautiful capital and other fine cities, Minas has a great future before it as a food-producing State. Its population is more mixed than that of San Paolo, but there is a large and energetic educated class which has furnished many notable statesmen.

At the commencement of the nineteenth century the period of conquest was a thing of the past. Throughout Brazil was a settled population—in some parts of wealthy white landowners, cultivating vast estates ; in some of cattle-breeders, whose herds roamed limitless pastures ; in others of half-breeds, or even of Indians, and crosses between the Indian and the negro, who also owned herds, or, perhaps, living in the backwoods, cultivated, with a slave or two, or with their own hands, the bare necessities of life. Besides the forest Indians, the negro slaves, the ignorant, backwood population of half-breeds, and the almost equally ignorant population of whites—who were educated at seminaries, if at all, knowing little of Europe, and less of the remoter parts of Brazil ; there being no printing-press, no newspaper, no means but gossip and conspiracy of forming public opinion, no means of piercing the fog of Catholicism but education abroad—besides these elements, which formed the nation, there was a constant influx of Portuguese : some courtiers, who returned after a while, and others

traders, business men, miners or adventurers, many of whom remained and were absorbed by the Brazilian nation.

In 1807 Napoleon's troops invaded Portugal. The Prince Regent, Dom João, was ruling in the name of Queen Maria, his mother. Successful resistance was impossible, and it was known that Napoleon intended to suppress the Braganza family. A perusal of Beckford's letters will give some idea of the pitiable degeneration of the Portuguese nation. For centuries the hardy and adventurous had left the country for her colonies; many of them perishing; the Jesuits, the Inquisition, and the general clergy had drained the intellect of the nation and left it without ambition or a moral sense.

The Royal family fled to Brazil, transferring the seat of the Crown; landing in the Bay of Rio in 1808.

Dom João was cultivated, kindly, and enlightened, but not a firm ruler. At the outset the country was not unanimous in its welcome; but on touching at Bahia, on his way south, he issued a manifesto declaring that all Brazilian ports should thenceforth be open to trade with all the world, and that goods might be exported under any flag. At the same time he practically abolished Royal monopolies, and greatly reduced the import duties.

After such news as this João's welcome in Rio was assured. His arrival was the great historical point on which the development of Brazil was to turn. The laws prohibiting industries (as disastrous as those which killed the industries of Ireland) were at once repealed, and printing-presses were established. All the machinery of civilisation was introduced; a mint, a powder-factory, a treasury, a council of finance, a bank, a school of medicine, a quarantine, &c. Vaccination was also

introduced by the Marquis of Barbacena, who experimented on his own son ; the latter dying recently at the age of 104 ; notwithstanding which epidemics of this disease have of late years swept away thousands in Rio alone, though it seems at last to be under control.

In 1814 a National Library was opened, the city was enlarged and rebuilt, and parks were laid out.

In 1815 the country was first proclaimed as the Kingdom of Brazil, being part of the " United Kingdoms of Portugal, Brazil, and Algarves." Queen Maria dying, Dom João was acclaimed King in 1818.

Many thousands had come in his wake : courtiers, nobles, politicians, officers, priests, lawyers, traders. Like the rush for the gold-mines, the transference of the Court from Lisbon resulted in a strong infusion of Portuguese blood, through women as well as through men ; a strain less virile than that of the pioneers, but one which afforded a factor for selection to act on, thus introducing variety, which makes, under healthy conditions of selection, for further racial progress.

Besides the development of Rio and the constitution of a civilised society, a lesser factor of national evolution was the constant warfare in Uruguay. Fought under primitive conditions warfare makes for the survival of the fittest ; under some conditions the fittest are the first to fall. Warfare like that of the Uruguayan campaign may be presumed, for many reasons, to extinguish the weaker. Another effect of such long-continued warfare is that men of superior courage, self-control, and fertility of mind are able to better their social status, thus infusing new and hardy strains into an aristocracy inclined to grow too close to type.

Uruguay was annexed in 1821, being known as the Cisplatine Province.

By this time Portugal had become intensely jealous of

Brazil, and resented the loss of her trade monopoly. At the end of the Napoleonic wars the Constitutional movement at length reached Lisbon. The Cortes was convoked as a Constitutional Convention. This Convention attributed the woes of Portugal to Brazil, and the absence of the King, and attempted to obtain the resumption of the monopoly.

The Court was only too ready to return to Portugal ; finally Dom João was persuaded to do so ; leaving his son, Dom Pedro, in charge of Brazil. The Brazilians themselves were loth to lose Dom João ; for one thing, they distrusted his determination, and feared that he might give in to the enemies of Brazil. He seems to have had some doubt of himself ; at all events, he secretly advised Dom Pedro, should Brazil demand her independence, to assure the crown at the moment of danger.

His last actions proved the indecision of his character. The Brazilians demanded the Constitution adopted by Spain. Dom João signed it, but on the following day revoked his signature, and, forming a Ministry, sailed two days later, leaving Dom Pedro behind as Regent.

Dom Pedro—at this time twenty-two years of age—was intelligent, well educated, and a good sportsman. His Portuguese ministers and courtiers, actuated by their greed and conservatism, precipitated the independence of Brazil by appointing a Junta responsible to the Cortes, without whose sanction no law nor commercial measure could be passed. All the Provinces were to be detached from the central Government at Rio, to be governed directly from Lisbon. Brazil was to be made the Ireland of Portugal.

Pedro had already acceded to many unreasonable demands. His position was by no means enviable. The Court was extravagant ; three thousand courtiers or hangers-on had returned to Lisbon with João, changing

their paper money for gold, and creating an enormous debt to the Bank. Pedro's courtiers, anxious to get rich quickly, wished to follow suit and clamoured to return.

Finally, the Cortes issued two despotic decrees ; one ordered the organisation of a provisional Government which was to reduce Brazil to the status of a province : the other bade Pedro return to Lisbon.

There was an immediate clamour of indignation throughout the country. Pedro, being appealed to, at once declared his intention of remaining with his adopted country. He founded the Andrada Ministry, at the head of which were the two famous Andrada brothers, and convoked a National Convention. The intention was to preserve the union with Portugal, but to maintain a Parliament at Rio. Deputies were sent to Lisbon for the purpose of submitting this resolution. Meanwhile Pedro issued a decree convoking the chief legislators of the Provinces, and another, declaring that no law promulgated in Lisbon should be enforced in Brazil without his sanction.

It was rumoured that Minas intended to oppose his authority. He at once visited that province and returned, having made the people his devoted supporters.

Regarding João, his father, as no better than a prisoner in Portugal, he announced that any attempted landing of Portuguese troops would be repulsed by force of arms, and that he would at all costs uphold his authority as Regent.

The Cortes insulted the delegates, ignored the claims of Brazil, and shortly ordered Pedro to return. The news found him hunting near the Ypiranga, a stream in San Paolo. He received it by declaring that he would never leave Brazil, but would spend his life in defending her rights. A month later, on his return to Rio, he was proclaimed Constitutiona! Emperor (1822).



SAN PAULO : JARDIM DA LUZ.



SAN PAULO : JARDIM DO SEMINARIO.



The Portuguese troops in Rio were deported. Other garrisons held out, but by 1825 Portugal gave up the struggle, and recognised the independence of Brazil. In the same year Pedro II. was born, the Empress being a sister of Marie Louise, ex-Empress of the French. In 1824 the northern provinces rebelled against the new Government, ignorantly declaring it to favour Portugal rather than Brazil. They declared themselves independent under the title of "The Federation of the Equator." One cause of grievance was that the Emperor had attempted to replace the elected Governor of Pernambuco by a nominee of his own. With the aid of Lord Cochrane the secessionists were defeated.

In 1825 commenced the Uruguayan war, ending three years later in the independence of the old Cisplatine Province, and greatly increasing the national debt.

In 1826 Dom João died, and a few months later the Empress of Brazil. Dom Pedro, heir to the throne of Portugal, abdicated in favour of his daughter Maria. She was to have married, when old enough, the rival claimant, Dom Miguel; but the latter seized upon the throne for a time.

In the meantime Dom Pedro was losing his popularity. Although he had separated Brazil from the mother country, he was accused of being swayed by Portuguese influences. He had also dissolved the Andrada Ministry and replaced it by a Conservative Ministry; on the following day he dissolved Parliament and exiled the Andradas. Ministry followed ministry; it seemed that Pedro was shaping for absolute monarchy. Finally, in 1831, after the dismissal of a Liberal Ministry for one composed of senators, the people of Rio rose in revolt. The police and the Army were with the people.

No violence was offered to the Emperor. At first he

refused to listen to the people ; but seeing that matters were serious he departed to Europe, and having first abdicated in favour of his son, eventually placed his daughter on the throne of Portugal.

Pedro II., then five years of age, was represented first by a Regency of three, and then by a single Regent chosen by the whole people. The Provincial Councils were replaced by Legislative Assemblies.

In 1835 a priest, Diego Antonio Feijó, was elected Regent ; he had previously been Prime Minister during a period of universal disturbance. Parties and cabals were innumerable, clamouring for many rights and reforms. There was civil war in the four great provinces of the north, and in Rio Grande do Sul it lasted for ten years.

Feijó was Regent for two years ; Olinda followed, satisfying no one ; so in 1840 Dom Pedro II., then fifteen years of age, was declared to have attained his majority.

The chief political peculiarity of his reign was a steady swing of the political pendulum ; Liberal and Conservative Ministries returned at intervals of six or eight years. During the course of his reign the Liberals finally became Republican and the Conservatives opportunists.

When Dom Pedro was twenty years of age the civil war in Rio Grande was finally terminated. For six years there was peace ; then Brazil lent her navy and her troops to assist Uruguay in her defence against Rosas, the Argentine tyrant. The independence of Uruguay was assured, and the tributaries of the Plata were declared open to navigation.

Some fourteen years later, however, Brazil was herself at war with Uruguay over some dispute. No later than the next year she was again fighting side by side with Uruguay and the Argentine against the Paraguayan

tyrant, Lopez. This war lasted for five years, and ended in the almost absolute extermination of the Paraguayan people. It was caused by the invasion by Lopez of all three States; apparently because Dom Pedro refused to consider his proposals for his daughter's hand. The war was terminated by the death of Lopez and the defeat of his remnant of followers; in 1872 the frontier was delimited.

Three times during Dom Pedro's reign the Crown Princess—Isabel—acted as Regent for her father. During her last Regency she signed the Bill abolishing slavery. The slave trade had been abolished in 1854, when the slaves in Brazil numbered 2,500,000; at the time of the emancipation, 1889, there were only 500,000, as a Bill had previously been passed by which the children of slaves became free. Despite the fact that all the rich planters of San Paulo depended upon slave labour, many of them joined or accepted the abolition movement. The 10th of July, 1888, was celebrated as a festival in France and the United States.

In the meantime the States had become almost unanimous in requiring a more plastic Government, to meet modern conditions; that is, the Liberals had become Republicans.

The following year was one of reaction and discontent, especially among those who had opposed the abolition; for the slaves had not remained as labourers, but had drifted away from their owners, as more than twenty years earlier the North American negroes had left the plantations of the Southern United States. But there was no movement of revolt, and no feeling of disloyalty towards Pedro II.

It must be remembered that João Ramalho's holding in the *capitanea* of São André was recognised as an independent State within a State in the early part of

the sixteenth century. It remained practically independent throughout the Spanish domination. In 1640 the Paulista brought forth a king of their own, who defeated their project by declaring for the King of Portugal. The conspiracy of 1789 showed a prompt sympathy with the French Revolution, which then and later had a profound effect upon the people; indeed, it is probable that a Brazilian revolution would have followed early in the nineteenth century had not the corrupt and greedy Court of João V. been removed to Portugal, while Brazil was declared independent. All through the reign of Dom Pedro I. one party continually complained that he trampled on the Constitution, and finally insisted on his departure. The second Emperor made the mistake of refusing to revise the Constitution. Agricultural expansion and ruinous wars diverted a powerful aristocracy and an ambitious soldiery from political action; but after the abolition of slavery it became obvious that Brazil must govern herself and solve her own problems.

Pedro II. was universally liked and respected. He should have been a *savant*, a connoisseur; a collector or professor; as a ruler he was either lacking in imagination or too apt to lean on the counsels of his friends. Owing to his personal popularity it was decided that nothing should be done until his death.

In 1889, however, the nation was startled by an announcement that Dom Pedro intended to abdicate in December in favour of his daughter. To accept Isabel as Empress meant to accept the Empire for another generation or to lessen the chances of the revolution. The Republican leagues and the Army, headed by Fonseca, an ambitious hero of the Paraguayan war, began to prepare for the *coup d'état*. The Conde d'Eu, husband of the Crown Princess, decided to create a strong Imperial Guard, and set a day for dis-

persing the troops by dispatching them to the remoter parts of the interior. But the troops never marched. The Emperor, leaving his chapel after Mass in Petropolis, received a telegram summoning him to Rio, as insurgents held the streets. He hastened to the Imperial Palace, which was at once surrounded by insurgent troops, and the Republic was proclaimed. Dom Pedro offered to form a popular ministry, but Fonseca replied that the Imperial family must leave Brazil within twenty-four hours. At 2 a.m. the following morning, having issued farewell manifestoes, the Emperor and his family embarked upon a Brazilian warship, which transferred them, guarded by two officers, to a steamer bound for Lisbon. The Republic was notified to the Powers; in a few days all was quiet as usual.

The Provisional Government immediately granted the suffrage to all literate adult males, and appointed a Constitutional Commission. November 15, 1890, was named as the date of the first session of the elective Constituent Assembly. Brazil was declared a federation of twenty States, while Church and State were separated. Many Imperial officers, military or civilian, were dismissed; some, who accepted the Republic, remained; when the Assembly met and the articles of the Constitution had been adopted Fonseca was elected President and Peixoto Vice-President. The Senate and House of Representatives were then elected.

The peace and order, and the praiseworthy lack of bloodshed which accompanied the Revolution and the institution of the Republic were unfortunately soon forgotten in the disorder and bloodshed of the first two Presidencies. For years the Imperial Army had been kept busy; officers had attained high military rank in half-savage warfare which by no means fitted them for

civil administration, and then for a few years warfare ceased.

As usual in revolutions in which the Army takes a part, it was almost inevitable that a soldier should be the head of the Provisional Government. It was equally unavoidable that some ambitious officer should decide that the first Presidency should be a 'military one in order to prevent disturbances; and that once President he should regard the Army as a means of keeping himself in power.

The States looked forward to the era of self-government promised them by the Constitution. The Union kept a jealous eye upon them, lest they should defy its authority.

Meanwhile Congress began to examine the actions of the Provisional Government. Discussions and resignations followed. The financial troubles of the nation demanded consideration. The exodus of the freed slaves had created a serious crisis. The Provisional Government had voted enormous sums for the establishment of free immigration. But the Treasury had not recovered from the Paraguayan war. Paper was therefore issued out of all relation to the gold basis; exchange fell to a degree that alarmed Congress, which passed a Bill restricting the issue of paper. Fonseca proceeded to veto this and other Bills; and various senators resigned in protest. Congress passed the Bills over Fonseca's veto. The President's impeachment was being considered when Fonseca dissolved Congress by military force, decreeing a new Revisional Congress. He then declared Rio to be in a state of siege; in other words, declared himself military tyrant. Rio Grande, Pernambuco, and Para threatened to secede. Fonseca at once sent troops to the former State, but they encountered an army of 50,000 men "prepared to march on Rio and depose the dictator," as their leader stated.



AVENIDA CENTRALE, RIO



Fonseca offered terms ; the forces refused to disperse until Fonseca should resign and the new Parliament assembled. This was in November, 1891 ; Fonseca proclaimed May 3, 1892, as the date of assembly for the new Congress, which was to be elected in February. He also recommended safeguards to uphold the President's veto and to limit the powers of Congress.

This was too much even for his former supporters. The Navy and most of the Army pronounced against him, and their leaders demanded his abdication. He resigned, and the insurgents in Rio Grande went peaceably home. He died later in the year.

Peixoto succeeded as Vice-President. The Parliament dissolved by Fonseca was re-assembled ; the vetoed Bills were made law.

A law was also passed enacting that should a Vice-President succeed within two years from the beginning of a term a new election should be held within three months.

Peixoto made the mistake of delaying this election, and of violating the Constitution by dismissing the elected Presidents of the States and appointing Federal Governors. Peixoto was at once called upon to order the election of a new President, and to refrain from interference in the elections by means of military pressure. This very proper remonstrance he treated as a "military conspiracy," and banished the signatories of the remonstrance. Matto Grosso, refusing its Governor, revolted and proclaimed itself a Republic ; but the revolt was soon put down. In Rio Grande the malcontents formed a similar movement in favour of secession. The Union again sent troops against them, an action of which the Navy disapproved. The Minister of Marine, Custodio de Mello, resigned. A Republican party, led by Ruy Barbosa, joined the Navy.

De Mello has been accused of ambition or of Imperialism ; be that as it may, on September 6, 1893, he demanded Peixoto's resignation within six hours. Peixoto declared martial law and disposed his troops around the bay. De Mello's fleet was not strong enough to effect a landing, nor could it force the entrance of the harbour ; so he threatened a bombardment if the forts fired upon the fleet. The forts did open fire, and the bombardment commenced upon September 13th. Nine days later the fleet again fired on the city.

Peixoto acted with great decision. He raised £800,000, bought some American steamers and armed them, and secured nine European torpedo-boats ; as well as a vessel with an American dynamite bomb-throwing gun. He also equipped certain old Brazilian vessels.

In Rio Grande the war was indecisive at first, but later on the secessionists were successful. Admiral de Mello, with two of his fleet, ran the gauntlet of the forts, leaving da Gama in command of the rest of the fleet. Meanwhile troops were drawn off to the south, weakening Rio, and the city began to suffer. In January, 1894, one of de Mello's vessels returned. The American admiral, whose interference during the siege had been difficult to justify, advised da Gama to give in. Da Gama demanded Peixoto's surrender and a *plebiscite* as to the form of government. Peixoto himself, for some reason not readily divined, demanded that all future Presidents should be civilians : a case of the devil preaching.

In the meantime Peixoto was treating prisoners with such barbarity as to cause his Minister of War to resign. Many followers deserted him on the suspicion of having secretly issued paper money. In the south the Federal cause was losing. Saraiva and de Mello, having fought their way to Paraná, were ready to attack San Paolo, and further troops were sent from Rio. In February da

Gama landed ; Peixoto's losses were the heavier, but the admiral was wounded. Shortly afterwards the forts sank three vessels. Meanwhile the rebels were about to strike at Santos.

At this juncture the Presidential election, long delayed, was held. Prudente Moraes was elected to succeed Peixoto in November. After the election Peixoto continued the struggle. The Minister of War was authorised to enlist troops by force ; and all crimes connected with the rebellion were decreed punishable. Finally, in March, his position greatly strengthened, Peixoto gave two days' notice of a general engagement. Da Gama, who was really a monarchist, offered surrender on condition of a general immunity and the pardon of rebel officers. Peixoto refused to commit himself, with the result that the refugees escaped upon Portuguese men-of-war.

Meanwhile de Mello, in the south, reorganised a Provisional Government of three representatives of the three seceding States. This the rebel Junta refused to recognise. This refusal led to dissensions ; an attack upon Rio Grande do Sul failed ; a Federal fleet was victorious at Desterro, and the rebel forces fled south. De Mello, with his ships and men, surrendered to the Argentine Government, which, in violation of its promise, surrendered them. In April, 1894, Peixoto declared the revolt at an end. As far as Rio Grande was concerned this was not the case. As late as 1895 da Gama encountered the Federal forces, and met his death on a stricken field. By July the secessionists were finally defeated.

After the war, before making way for Moraes, Peixoto increased the severity of military discipline, and enlarged the regular army to a strength of twenty-four thousand men. He had certainly "pacified" the country, but the

revolts which he suppressed were almost entirely the result of his own tyrannical actions. A few months after his retirement he died.

THE CIVILIAN PRESIDENTS.

Moraes succeeded in November, 1894, with an avowed policy of economy, financial reconstruction, and the suppression of military interference in politics. It was his ambition to reform the currency and to cut down useless military and naval expenditure; hence a conspiracy with the object of restoring Peixoto, in the Military College of Rio, always a nest of intrigue, which he promptly quashed by closing the college.

What Moraes could do to correct the results of years of corruption and irresponsible finances, that he did. His presence at the head of affairs brought the better class of politicians back to public life. The depression throughout the country was critical; the previous Presidency had left the Treasury embarrassed; the price of coffee had fallen; exchange was falling. Moraes quickly restored confidence in the Government and the future of the country, though his term of Presidency was too short to allow of more than expedients and the laying down of principles.

It was also disturbed by a curious rebellion in Bahia. A certain Antonio Maciel had under his roof that worst of devils—a jealous mother. She stated that her daughter-in-law had a lover; if Maciel would go to a certain place at a certain time he would find them together. The mother then persuaded the innocent wife to go to some neighbouring spot after nightfall; then, dressing in man's clothes, she followed her. Her acting convinced Maciel, who shot them both. He was set free after his trial, and became a sort of "revivalist" mission-

ary among the ignorant Catholic backwoodsmen of the *sertão*. He collected money, obtained a following, founded a colony, and erected churches. There are reasons for supposing that the restorationists made use of Maciel ; others regard the rising as a purely fanatical outbreak.

It is said that Maciel, or Conselheiro, as his followers called him, quarrelled with a contractor, accusing him of embezzling moneys collected for the building of a church. The contractor complained to the authorities that he was threatened. The Governor sent police to protect the merchant ; they were killed or driven off. Further attacks failed : the State had to call for troops. The Federal troops found eight thousand men opposing them, and lost six hundred men, with guns and ammunition. Similar insurrections against an "atheistical Government"—either inspired from Portugal or by dense and bigoted ignorance—sprang up in four other States. After another defeat, the Union sent seven thousand men to Pernambuco, and most of its artillery to Bahia. These reached the rebel stronghold after two months' constant fighting, when eight thousand rebels were defeated. A few months later, after constant engagements, the maniac, with thousands of his followers, was killed.

When the troops were being reviewed upon their return an assassin fired at Moraes, but killed General Bittencourt, who flung himself in front of the President.

Moraes retired with the praise of the whole nation. He was by some called the American Lincoln ; he had all his life been an outspoken Republican, and was a stern, practical man of dignified presence.

Brazilian finances were still suffering from the drain of the Paraguayan war and thirty years of deficits ; but after the attempt upon Moraes the country seemed weary of

sensational politics, and settled down seriously to a period of earnest reform. The great task of the new President, Dr. Campos Salles, was to re-establish the finances of the country. He suspended payment in specie for a time, and burned large quantities of paper money.

Dr. Alves, who followed, was able to devote his whole term to the material and financial development of the country. Profiting by the work of Dr. Salles, he was able to leave the credit of Brazil more firmly established.

Dr. Penna is famous as having founded the Caisse de Conversion. He also developed the immigration system, and a policy of settled colonisation and railway expansion.

At his death, in 1909, Dr. Peçanha, the Vice-President, succeeded. He paid special attention to reorganising the educational system of Brazil, and to the removal of tariffs upon such machinery as is necessary to agriculture and other important industries.

At the necessary election Dr. Peçanha was not elected, but Marshal Hermes da Fonseca, late Minister of War. This is a startling reversal of the accepted policy of a civilian President ; but it is, as yet, too soon to guess what it portends. Fonseca is fifty-five years of age, an experienced soldier, and a great authority upon military and technical education. He is regarded as a zealous patriot and a man of the highest principles. It may be that the Portuguese Revolution has been long foreseen, and that in case of irresponsible echoes in Brazil a strong man was needed at the head of affairs ; or the significance of the fact may be quite otherwise ; or Fonseca may be regarded as an educational expert. His election is so recent that we can only await events ; just as we cannot as yet foresee whether the final dethronement of the Braganzas and the declaration of the Republic in Lisbon—possibly to be followed by the Republic in Spain—will have any appreciable effect upon Brazilian life.

CHAPTER II

THE BRAZILIAN LANDSCAPE

The soil—The plateau of the Atlantic coast—Vegetation—The tropical forest of the seaboard, and its influence over the history of Brazil—The highlands of the interior—Monotony of the Brazilian landscape—Typical landscapes—The country and the city.

THE territory of Brazil has fifteen times the area of France. Its immensity is increased by the difficulty of communications. After days spent in the saddle a glance at the map amazes the traveller, so insignificant seems the distance covered. Great stretches of territory are still hardly known, having been crossed only by travellers indifferent to or ignorant of geography. The maps are, in general, imperfect, and their fidelity must not be relied on.

Picture to yourself, behind the seaboard of the South Atlantic, running from Cape San Roque to the neighbourhood of the Rio de la Plata, a vast table-land of irregular structure, which covers half Brazil. Beyond this, towards the interior, across immense, vaguely uneven plains of sandy soil, you reach the central depression of South America; the basin of the Amazon stretches to the north, and that of the Paraná to the south. In the north the basin of the Amazon belongs entirely to Brazil; in the south the Paraguay and the Paraná are Brazilian only in their upper reaches.

Southern Brazil is limited to the belt of table-land ; the hinterland, the plains, are not Brazilian. While in the north the Amazon, both at its mouths and along the greater part of its basin, is a Brazilian river, to the south Brazil does not even reach the Rio de la Plata, the common estuary of the Paraguay, the Paraná, and the Uruguay. This lack of symmetry is the leading characteristic of the geography of Brazil. The high plains of the interior, which shed their waters both north and south, have never been of economic importance ; the valley of the Amazon has been developed only of late years, and its population is as yet small. It is therefore the table-land of the Atlantic seaboard, from Uruguay to Ceará, that constitutes the soil of historic Brazil. Through its length of 1,800 to 2,200 miles this table-land presents the greatest variety of aspect, and has no hydrographic unity. Its height is greater to the south, where it reaches some 3,200 feet. This general slope from south to north is revealed by the course of the San Francisco. In Brazil the name of Borburema is employed to denote the northern portion of the plateau. This old geographical term deserves preservation, as it represents a region which has its own peculiar characteristics. The dry season there is a long one, and the Borburema does little to feed the small seaboard rivers which flow fan-wise into the Atlantic ; for the plateau in that region slopes gently to the sea.

It is otherwise in southern Brazil. From the State of San Paolo southwards the seaward face of the plateau is a huge bank, some 2,500 or 3,000 feet in height, which separates a narrow strip of coast from the basin of the great rivers inland. This long bank or watershed bears successively the titles of Serra do Mar and Serra Geral. From San Paolo to the Rio Grande no river pierces its barrier ; but the streams which rise

upon its landward side, almost within sight of the sea, cross the whole width of the plateau before they join the Paraná or the Uruguay. Thus the Serra do Mar is not really a mountain-range; though it has, from the sea, all the appearance of one, owing to its denticulated ridge; but the traveller who reaches the crest by crossing the inland plateau arrives at the highest point by the ascent of imperceptible gradients, and only discovers the *serra* when he breaks suddenly upon the sight of the ocean thousands of feet below.

Beyond the *serra* is the territory of Minas; a confused mass of mountainous groups, among which it is no easy matter to trace one's way, either on the map or on the trail itself. An enormous backbone of granite, the Mantiqueira, crosses the southern portion of Minas; and the railway painfully ascends its grassy slopes. The Mantiqueira, which receives on its southern flank the rains brought by the ocean winds, is the highest point of the plateau, and the hydrographic centre of Brazil. It gives birth to the Rio Grande, the principal arm of the Paraná.

As soon as we cross the southern frontier of the State of San Paolo the plateau is transformed; there is no more granite, and the landscape grows tamer. The primitive measures of gneiss and granite, out of which the Serra do Mar is carved, are covered to the westward by a bed of sedimentary rocks, of which the strata, dipping toward the west, plunge one after the other under other more recent strata. They consist exclusively of red and grey sandstone, and the sandy soil which results from their decomposition covers the western portions of the four southern states. The topography of the country changes with the geologic structure. The outcrops of sandstone, which one crosses in travelling westward, cut the table-land into successive flats. Irregular ranges

turn their abrupter slopes towards the east, as the banks of the Meuse and Moselle in the basin of the Seine; the rivers flow close underneath them, running through narrow gorges. Even the least experienced eye could never mistake these cliffs of sandstone for ridges of granite; these are not mountain-chains, not *serras*, but, according to the local term, *serrinhas*.

In Santa Catharina and Rio Grande enormous eruptions of basaltic rocks have covered a portion of the plateau. The basalt has even reached the seaboard, and southward of the island on which Desterro is built it overlies the granites of the Serra do Mar. The south flank of the plateau, which overlooks the prairies of Rio Grande, is also basaltic. The popular judgment has gone astray, having given the same name—the Serra Geral—to the granitic chain and to the edge of the basaltic overflow, as if one were a continuation of the other.

If we except the prairies of Rio Grande, where the pampas of the Argentine and of Uruguay commence, there is nothing in front of the Serra do Mar but a narrow sandy waste. The rains which scar the face of the *serra*, wearing it into ravines, do not irrigate it sufficiently; and the rivers, of little volume, are spent in slowly filling the marshes that border the coast; they are lost finally among the granite islets, in the deep bays which the first explorers insisted were great estuaries. From the Rio Grande to Espirito Santo the Parahyba is the only river that has been able to deposit, at the foot of the *serra*, and around its outlets, a solid and fertile alluvial plain; it is there that the sugar-mills of Campos are established.

It is the vegetation above all that gives the various regions of Brazil their peculiar character. It is a mistake to suppose that Brazil is entirely covered

with forests. The forests are concentrated upon two regions : the basin of the Amazon and a long strip of seaboard along the Atlantic coast between Espiritu Santo and Rio Grande. The forests require abundant rains ; and the Serra do Mar, receiving the humidity of the ocean winds upon its dripping flanks, incessantly hidden by mists, produces far to the south the conditions which have made the Amazonian basin the home of the equatorial forest. For a distance of 1,200 miles those who have landed at the various practicable inlets have found everywhere on the slopes of the *serra* the same splendid and impenetrable forest. Even to-day it is almost untouched. It encircles and embraces Rio ; it seems to refuse it room for growth, as in the tale of Daudet's, in which the forest reconquered in a single springtide the land which the intrepid colonists had stolen from it in order to found their settlement.

Beyond the belt of swamps which extends along the coast, where ill-nourished trees, overladen with parasites, struggle against imperfect drainage and poverty of soil, at the very foot of the *serra*, the true forest begins. The dome-like summits of the great trees, ranged in ascending ranks upon the slope, completely screen the soil they spring from, thus giving the peculiar illusion that this wonderful vegetation rises, from a common level, to the extreme height of the range. Here and there only emerges from the foliage the smooth water-worn side of a granite bluff. The railway track runs between walls of verdure ; the underwoods, which elsewhere suffer from the lack of light, grow eagerly along the sides of the trench-like clearing. Lianas, ferns, bamboos, grow vigorously as high as the tree-tops. One seems actually to see the brutal struggle of the plants toward the sunlight and the air. Many travellers have spoken of the sense of conflict and of violence produced by the virgin forest.

There is, indeed, along the clearings cut by man, and over the trees which he fells, but does not remove, a fierce battle between species and species, individual and individual; a desperate struggle for space and air. As always, it is man who introduces disorder into the heart of nature. Far from his track order reigns, established by the victory of the strongest; and the forest which has never been violated gives a profound impression of peace and calm.

The *serra* is the true home of the equatorial forest. But it covers beyond the ridge the southern and western portions of the State of Minas and the basins of the Rio Doce and the Parahyba. The Mantiqueira very nearly marks the limit of the forests; beyond commences a dense growth of bush. I remember a long journey along the northern slope of the range upon which is built the new capital of the State of Minas, the city of Bello Horizonte. Towards the north we could see vast stretches of uncovered land; the mountains were partly clothed with narrow belts of forest, which climbed upward through the valleys to the very sources of the streams; we passed alternately through thickets of thorn and prairies where the soil was studded with the nests of termites. The dense trees, deprived of their leaves by months of drought, were beginning to revive, and were decking themselves with flowers, of a startling wealth of colour unknown to the forests of the humid regions. There it was that the bush commenced. It stretched unbroken to the north—unbroken save for the streams, which were full or empty according to the rain they had received.

In San Paolo also and Paraná the region of afforestation is not limited by the ridge of the *serra*. Forests and prairies alternate on the plateau. The fires which the Indians used to light in the savannahs have destroyed

the forest in places ; yet man has played but a little part in the present distribution of vegetation. The forest has persisted wherever the natural conditions were favourable, holding tenaciously to the humid slopes of the hills or to rich and fertile soils. Certain soils, either by reason of their richness or their moisture, particularly favour the forest, while on lighter soils the trees can ill resist the drought. The diabasic soils of San Paolo are always covered with a mantle of forest ; so much so that a map of the forests would be equivalent to a geological map.

The forest of the plateau, intersected as it is by stretches of prairie, is less dense and less exuberant than the forest the *serra* ; and as we approach the south the difference is yet more evident. Towards the boundaries of San Paolo and Paraná the tropical trees are replaced by resinous varieties. The immense pines of the Paraná, with straight trunks and wide, flattened crests, whose shape is rather reminiscent of that of a candelabrum with seven branches, cover with their sombre grey the wooded portions of the plateau from the Paranapanema to beyond the Uruguay. With their open foliage, pervious to the light, these woods resemble the pinewoods of Europe.

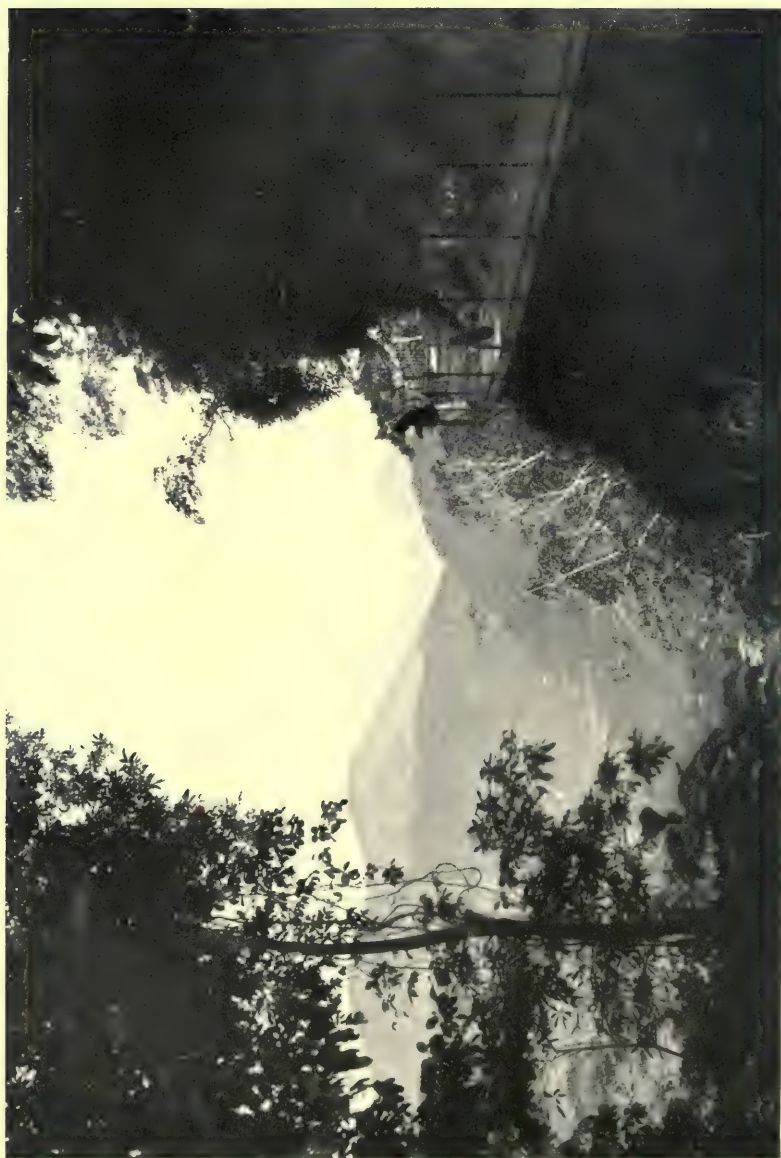
To find the tropical forest once more we must push as far as the Serra Geral, whose southern slopes run down towards the prairies of Rio Grande, as on the east they descend towards the sea. There, on the basaltic flanks of the *serra*, is a last fragment of the tropical woods. In magnificence it almost equals the forests of Rio or of Santos. It is the equatorial forest that makes the continuity of the *serra*, not its geological constitution. When the Brazilians speak of the *serra* they think of the forest rather than of the mountains. Incautious cartographers, who have worked from second-hand data,

which they have not always interpreted correctly, have sown the map of Rio Grande with a large number of imaginary ranges. One seeks them in vain when traversing the country ; but one finds, in their place, the forests which the inhabitants call *serras* ; the term for mountain has become, by the latent logic of language, the term for forest. Nothing could better emphasise the importance of vegetation in the Brazilian landscape ; it effaces all other characteristics.

Forest, bush, and prairie change their aspect with the cycle of the seasons. The whole interior of Brazil knows the alternation of two well-defined seasons. The temperature is equal all the year through ; there is no hot season, no cold season, but a dry season and a rainy season ; this latter corresponds with the southern summer. At the first rains, which fall in September or October, the wearied vegetation abruptly awakens. Then comes the time of plenty, when earth affords the herds of cattle an abundant pasturage. March brings back the drought to the scorching soil. The region of rainy summers includes all the State of San Paolo, extending sometimes as far as Paraná. Further south the rhythm of vegetable life is no longer swayed by the distribution of the rains, but by the variations of the temperature, which grow always greater as one travels south. From June to September frosts are frequent in Rio Grande. The cattle on its pastures suffer from cold as much as from hunger. Spring returns, and the grass grows as the sun regains its power. This is the only portion of Brazil in which the words winter and summer are understood as they are in Europe.

But the ocean side of the *serra* knows no seasons ; all the months of the year are alike ; all bring with them an almost equal rainfall. There vegetation is truly ever-green, everlasting, unresting. The ridge of the *serra*





CORCOVADO, RIO.

divides two different countries. If it is true that the division of the year into well-marked seasons, that powerful aid to the agriculturist, is the privilege of the temperate regions, then tropical Brazil is found only at the foot of the *serra* and on its slopes; the interior is another Brazil.

Its advent into Brazilian history dates very far back. The first colonists immediately climbed the *serra*, and so discovered the vast territories which offered them a climate more favourable to their efforts. The belt of seaboard was too narrow and too hot to be the cradle of a nation. Colonisation was effected otherwise than in the United States. In North America the pioneers settled along the seaboard, in a bracing, healthy climate, and there dwelt for a long period without any thought of crossing to the west of the mountains which limited their outlook. They prospered and multiplied in their narrow domain, and, having formed a nation, only then began to extend their territories toward the west. In Brazil, although the administrative capital of the colony remained upon the coast, men quickly began to penetrate the interior. To-day even to the seaward of the plateau to which the immigrants made their way, and which they have everywhere opened up for exploitation by labour, the soil remains but sparsely populated. While the forests of the interior gradually recede before the agriculturist, Brazil has kept the forest of the littoral intact, and man has not disputed the claim of the woods. They form, between the seaboard cities and the agricultural regions of the plateau, an uninhabited frontier, a sumptuous but deceptive frontage. Many travellers know nothing of the country but the seaboard forest. It deceives them as to the nature of Brazil, and as to its economic progress. The living members of Brazil are hidden behind it as behind a screen.

After the first astonishment has abated, and when one has travelled far and for long periods, the eyes at last become tired; they become inured to the opulent scenery, and even find the landscape monotonous. The sombre green of forest or prairie everywhere hides the rocks; the soil stripped bare by the roads is of a dull, uniform red; even the dust is red. Bright colours and broken lines are equally rare. One travels continually among rounded hillocks of green; the humid climate hides or softens the contour of hill and valley alike. The memories of one's journeys blend and grow confused; reminiscences of forests, skirted or traversed; clumps of banana-palms near fordable streams; windings of the twisted trail in the midst of undulating prairies. . . .

Yet this monotony is due far less to Nature herself than to the scarcity of man; to the insignificant degree in which his works enter into the landscape. It is a monotony not peculiar to Brazil; it is common to all new countries. A man who has always lived in France, where the generations have laboured for so many long centuries to tame, discipline, and diversify nature, and where nature has accordingly become so profoundly humanised, forgets too often that the landscape is the work of man. What is a French landscape but a view, amidst a vegetation which was introduced and is governed by man, of the houses and the roads that man has built? Of primitive nature nothing is left, save the broader contours, the general sweep of the horizon, the bare outlines. In Brazil, on the contrary, a widely scattered population of recent origin is struggling against natural forces which are stronger than itself; the human landscape is as yet unfinished.

If we travel towards the interior of the continent and pass beyond the agricultural regions all traces of the

presence of man disappear. One reaches what the Brazilians call, by an untranslatable name, the *Sertaon*;¹ the Algerians would call it the *Bled*: a country without house or trail, where trade has as yet introduced no vestige of comfort; where every encounter is an event; where the traveller finds his way by means of the compass, lives by the spoil of his rifle or the contents of his saddle-bags, and sleeps with his saddle for pillow. The boundaries of the *sertaon* change; they recede with the passage of years. They must be sought far inland now; and the majority of Brazilians know no more of this country than the peasants of Beauce or Brie know of the mountains or the waste heath. But the engineers, prospectors, and pioneers, who graze in the *sertaon* their half-domesticated beasts, are fervently attached to the free life which they lead there.

On returning from the *sertaon* the smallest hamlet seems a city, the most modest *fazenda* a palace.

The southern portion of the State of Minas offers one of the most characteristic aspects of the Brazilian countryside. The whole region has been reclaimed entirely from the forest, and even to-day it is still known as the *Matta*, the forest. But the primeval forest has everywhere been destroyed; the forests now standing have risen from land formerly cleared. This reconstituted forest is called in Portuguese the *capoeira*. It needs experience to distinguish it from the untouched virgin forest, so rapid is the growth of the trees; the enormous trunks at which you marvel are giants of twenty-five years; you believe

¹ Properly speaking *sertão*, just as *San* is properly *São*. The Portuguese *ão* denotes a nasal *n* after the vowels; but the spelling *San*, from its use by Spaniards, Italians, and English, is commonly retained in speaking of San Paolo and a few more well-known cities or features; while the spelling *sertaon* will be retained throughout this book. It should be pronounced nearly as in French.—[TRANS.]

yourself still in the forest, but the *fazendeiro* who is your guide explains that four years ago, in this very spot, the soil was cleared and a crop of manioc was harvested. Happy country, to know no fear of deforestation! Here the forest has its place in the cycle of work which we demand of the earth: in the very rotation of crops. After a few years of culture one confides the earth to the forest, that it may play its part in regenerating the soil and reforming the fertile surface mould.¹

Through the *capoeiras* we reach the cultivated fields which feed and support the *fazenda*. The sugar-cane grows green in the damp hollows and bottoms; the slopes are beautiful with the coffee-bushes, whose leaves glisten like bay-leaves or laurel; and maize ripens between the rows. The pastures, which are burned to make the grass more tender, are surrounded by hedges of bamboo, stripped near the ground by the cattle. Clusters of bamboo fuse and mingle like showers of rockets; and here and there the fan-shaped palms cast their pools of shadow. The roads are crossed by wooden

¹ The explanation of the advantage of the old Indian method of cultivation—the clearing of ground by burning the forest or bush—without which it would hardly have survived through the centuries—is at last explained. The heat, penetrating to a considerable depth, kills the earth-dwelling organisms which feed on the nitrogen-fixing bacteria. Whether these bacteria are harder to kill, or whether the wind bears them at every breath, the fact remains that they multiply to such an extent in soil that has been baked, steamed, or otherwise heated, that the same soil will bear double the crop after such treatment.

Vast forest fires, on the other hand, such as devastate the Canadian pine-clad ranges, will sometimes result in years of sterility. This may be due to the infiltration of antiseptic resins into the soil from the half-burned roots, or to the fact that the extreme heat kills both zoöphyte and bacterium to the limit of the depth at which they live, or partly to the dense bed of charcoal which would keep the soil protected from wind-blown organisms.—[TRANS.]

gates, which prevent the cattle and horses from straying from *fazenda* to *fazenda*; one meets, now and again, a *fazendeiro* making his rounds, mounted on a lively, docile little horse, which goes at an amble, his long tail streaming behind him. One is warned from afar, by the piercing squeal of their axles, of the approach of the wagons which are carrying in the crops; wagons drawn by four yoke of oxen, whom the barbarous music appears to stimulate.

In Brazil the ox is not used in husbandry, but only for draught. From time to time one passes the rustic huts of the labourers, who are nearly all negroes. You may see them on the distant hill, working noisily in a gang under the eye of the overseer. When their voices are silent you are haunted by the sound of the heavy stamp, which is worked by the neighbouring stream; this is the primitive mill, preparing flour for some ebony housewife.

We turn aside and reach the *fazenda*. It is usually built on low ground near the stream. Sometimes the sugar-mill and the coffee-tank are built at the foot of a hill, while on the summit or the rising ground midway is built the large, square house; of simple design, with a roof of tiles that are quickly covered with moss. A garden surrounds the house, with orange-trees laden with fruit; so productive that the oranges lie rotting on the ground beneath. On the terrace are some of those palms whose trunks are like tall, slender columns; like flagstaffs planted before the house; or the slender turrets which the old seigneurial country homes of France flaunt on high across the landscape.

Other crops, other aspects. The smiling plain of Campos is covered with fields of sugar-cane, above which tower the chimneys of the factories. In the coffee districts of San Paolo the long rows of shrubs

are like a straightly combed fleece of green upon the distant hills, whence all poorer crops have been eradicated. The mud hut of the negro is replaced by the whitewashed house in which the Italians or Spaniards live. In Rio Grande or Paraná the colonists from northern Europe, a people full of domestic virtues, surround their homes, often tastefully built or brightly picturesque, with gardens full of flowers, and extend their clearings in a methodical fashion.

As though in all these different regions they represented a unity of principle, the rural centres are very much alike. Excepting certain Polish colonies, where we still find in the churches an ancient style of wooden architecture, brought from Europe, all these inland villages are built on the same model, ranged in terraces on the slope of a hill, the houses low, and distempered in white, rose, or green. The church has two belfries : two square lanterns, each one surmounted by a little octagonal cupola ; above the door is a kind of classic pediment. Thus the style which ruled the world in the eighteenth century is still modestly perpetuated.¹ I leave you to imagine the joy with which one comes in sight of such a village, however small, after a long day in the saddle.

The majority of the towns are built on the plateau. The town whose history is the most curious is the new-born capital of the State of Minas Geraes. Bello

¹ Traces of Dutch colonial architecture are to be seen further north. Generally the architecture of the small towns is based on the sixteenth and seventeenth centuries, and is tasteful and satisfying. In the chief cities it inclines at times to be flamboyant, but shows signs of genuine vitality. There is no absolute ugliness or tawdry vulgarity in the Brazilian cities ; the State capitals in especial have fine administrative buildings, and are laid out with an eye to the landscape.—[TRANS.]

Horizonte was founded by decree—if I remember rightly, some fifteen years ago¹—on a desert site where palm-trees grew erect amidst the bush ; some of these trees are still standing in the gardens of the town. A plan was drawn up ; space was designed for a population of 300,000 souls ; and the city might well have been called, as Washington has been, the city of distances. The name of Bello Horizonte is drawn from the site it occupies ; far from the torrid damp of the seaboard forests, in the midst of the empty plains, it is a joy for the eye merely to follow, from the height on which the city stands, the vast lines of the horizon across the leagues of transparent atmosphere. All the cities of the table-lands—such as San Paolo and Curitiba—resemble Bello Horizonte, not only because they have grown so swiftly, but because the light and atmosphere are the same, the horizons equally vast.

The cities of the coast are more individual ; partly because they are older ; also because their sites have their own peculiarities ; from Pernambuco and Bahia, the sister capitals of old Brazil, set in their gardens of mangoes and bread-fruit palms, down to the little picturesque harbour-towns of the southern shores, such as Paranagua and San Francisco, with their ancient, crumbling Portuguese custom-houses.

Rio is the pride of the Brazilians. At the entrance to the bay towers an inaccessible mass of granite, its foot lapped by the waves : this is the Sugarloaf. Its shape, strange yet familiar, is dear to the Brazilian people ; it is one of the most universally cherished symbols of the native land. A Brazilian relates that, having completed Rio Bay, the Creator, well content with his masterpiece,

¹ Bello Horizonte was founded by the President of Minas, Dr. Penna, who was recently elected President of Brazil, and died last year.—[TRANS.]

decided to point it out for the admiration of man by means of an exclamation-mark. This point of exclamation was the Sugarloaf. The first impression is sufficiently striking, whether one arrives at Rio by night, when the bay lies asleep between the city lights and the lights of Nictheroy on the opposite shore, so that only the silhouette and the setting of the scene are visible ; or whether, as day breaks, the light reveals the sumptuous colours of the landscape : the greys of the water, the ochrous yellow of the soil, the painted houses, the sombre background of the forest and the sky, heavily draped with dense low-hanging clouds.

Rio is built on a narrow alluvial plain surrounding several hills of granite, which were formerly islets in the bay. Several of these hills have been razed with pick and blasting-charge ; but hitherto the highest and the most picturesque of all, the Morno del Castello, has been respected ; the astronomical observatory is installed there, within the walls of an old Jesuit church which was never completed. It seems that men are conspiring even against the Morno del Castello ; that it too is in danger of being levelled to the ground. I take this opportunity of appealing for its protection ; to destroy it would be a sacrilege. What would Buenos Ayres give for such a hill in the midst of the monotonous level of her site !

Two streets form the heart of Rio : the new Central Avenue and the old Rua do Ouvidor. The Central Avenue was the work of two years, and was driven through the midst of the old city ; the great buildings which face upon it mark the introduction into Brazil of the American steel frame construction. The appearance of the street is luxurious, but a little cosmopolitan ; I personally prefer the Rua do Ouvidor. It is narrow, a little gloomy, yet graceful ; there is no stream of traffic,



RIO DE JANEIRO : THE BAY FROM THE CITY.

but the paper-sellers spread their bills on the pavement. It is here that the townsfolk come to display and admire the triumphs of fashion ; it is here that one may obtain a sense of the life of the rich classes of Rio.

One should see Rio from the heights of Santa Theresa or Corcovado ; like all cities built upon a flat site, it hides behind its frontage when viewed from the water ; one discovers it only by surmounting it. You climb the hill of Santa Theresa by zigzag paths, which are planted with trees whose trunks are clothed with hanging mosses. Their roots—so powerful is the vegetation here—continually raise the stones of the paved way, making of the road a kind of irregular staircase. From the summit you may distinguish the old quarters of the city ; the modern avenues ramify like the gullies of a mountain valley. A medley of rocks and summits lines the coast toward the north ; the bay, held as in a deep bowl, contains an archipelago of wooded islets ; and the line of the Serra do Mar encloses the horizon. The forest is present everywhere ; around the city, which it hems closely in ; even within the city itself, in the gardens and on the steep slopes on which building has not been feasible. Not a field around Rio to speak of colonisation, of the domestication of the soil. In this coastal region the dominion of man is confined to the limited area of the cities.

CHAPTER III

WAYS OF TRAVEL

The ocean ways—The coasting trade—The river traffic-ways—The roads—The ancient highways and their geographical significance—The geography of the Brazilian railway system—Trans-Brazilian and trans-Continental railways under consideration—The railway and colonisation.

THE great means of communication in Brazil has been, is, and probably always will be, the sea. From the very foundation of national unity the coasting trade has tended to consolidate it; for the sea unites the various settled provinces, which more often than not are separated from one another by tracts of land as yet uninhabited. Navigation is active all along the coast, and the coasting trade is by law reserved for Brazilian vessels. These coastwise voyages can to-day be made most comfortably on very fairly rapid steamers. The ports of call are numerous. The vessels go from port to port from the rocky bays of the south, which are surrounded by mountains, to the scanty streams of the Borburema, where the tide floods the sandy bottoms with clear water, between the low banks on which the cocoa-palm grows, and the great estuaries of the Amazon, where powerful currents pour forth their fresh but turbid waters.

Besides the maritime navigation of Brazil the river navigation is fairly well developed. It has no rival as a

means of transport in the entire Amazonian basin. There the forests are pierced by the rivers only. It is by boat that the immigrants make the first stage of their journey from Para to Manaos. The transatlantic steamers reach Manaos without breaking bulk. Beyond, a flotilla of small steamboats serves the rubber stations. The labourer who wishes to escape from the forest has no other means than the steamers; the employer, to prevent desertions, has only to watch each vessel during its call; once the steamer has gone his labourers are imprisoned with him. At Para the life of the river is picturesque; one sees there to a certain extent what is found on a large scale in the ports of the East. Instead of junks, great lighters or barges, with heavy sails, are moored to the quay; families live on them, as on the houseboats and sampans of the East. One meets them everywhere, heavy loaded, under a spread of grey sail. The region of the estuaries is their home; but sometimes they push as far as Oyapock, and adventure by sea to the Guianas and the West Indies, where small sailing traders are still so numerous.

The basin of the Amazon forms a splendid system of water-ways; elsewhere in Brazil the river traffic is only of local importance. The Paraná is barred by the falls of Urubupunga, above the confluence of the Tieté, and at Sete Guedas, above the confluence of the Yguassu. The Tieté also flows from fall to fall. The falls of Paolo Affonso, on the Rio San Francisco, are famous; and the cataracts of the Yguassu, once they are more accessible, will attract tourists as Niagara does to-day. Navigation is thus limited to the practicable stretches of these rivers; it saves a few days in the wagon, but performs no services of general interest.

I have pleasant memories of some days of travel on the Yguassu. To be strictly truthful, I found a certain

disregard of comfort useful, and also a little of that quality so general in Brazil: patience, which you may interpret as indifference to loss of time. Misfortune led me to embark on that one steamer of the flotilla which had the worst reputation as a lame duck; it was a large iron pinnacle of a kind, with the boiler set well forward, and a large paddle-wheel which occupied the entire stern. The roof or awning was of sheet-iron; the cargo consisted of sacks of *maté*-leaves, which exhale an acrid, penetrating odour. I shared with the crew their black bean soup and the *maté*, which we drank through the same reed in turns. We slowly ascended the current, between banks on which palm-trees alternated with pines. We slept on the sacks at night, while the storm lit up the forest. When short of fuel we ran the bow of the vessel into the trees of the bank, when crew and passengers alike busied themselves in felling a tree and cutting it into logs. We then had to wait until the pressure mounted in the boiler; the engineer watching his pressure-gauge with a placidity most irritating to my companions, whom years of travel in the *sertaon* ought to have trained in philosophy. But we arrived at our destination in safety, and the cargo of *maté* was landed without a hitch; which matters are assuredly of a much more general interest. Even had the success of the voyage been less complete I should not judge Brazilian navigation by this experience. As well judge French shipping by "La Belle Nivernaise."

I know of only one locality in Brazil in which there is an actual fluvial network. I speak of the surroundings of Porto Alegre, in Rio Grande. Here is a fan-shaped group of rivers which add greatly to the prosperity of the German colonies which they serve. They empty themselves in the Lago dos Patos, a long salt-water lagoon, in which, as in the Amazon, there is a floating population

of boatmen. Lighters, tugs, and schooners enliven its waters. There is a similar state of things two hundred miles south, on the channels of the Rio de la Plata.

River navigation is almost everywhere receding before the railways. A river is regarded as navigable only as long as it constitutes the safest and least costly route. If another more convenient line of transport is opened the river is abandoned. So in France the water-way of the Loire was in continual use until the railways were built. Formerly a large number of the rivers of Brazil were utilised for transport. Two centuries ago, in order to gain the interior, the Paulista adventurers—the *bandeirantes*—descended the Tieté by boat, and the route they followed is to-day so completely abandoned that the San Paolo Geological Commission had to organise a considerable expedition in order fully to explore it.

The land communications are mostly bad. Some of the trails are very old. One of the oldest is that which connected Rio with the centre of the State of Minas, the ancient capital known by the sumptuous name of Ouro Preto—that is, black gold. Its existence was ephemeral. D'Orbigny, who visited Ouro Preto in the middle of the nineteenth century, devotes a few lines to it :—

“It is between Rio de Janeiro and Villa Rica (Ouro Preto) that communications are easiest and most frequent. Almost every week a caravan leaves the city, bearing towards the coast the products of the country : cotton, hides, precious stones, and ingots of gold ; to bring in exchange salt, wine, cloths, handkerchiefs, mirrors, ironmongery, or slaves bought for employment at gold-washing in the mines.”¹

This road exercised an extraordinary attractive power over the population. Even to-day, when all traffic on it has ceased, when it has fallen into ruin and is in parts

¹ D'Orbigny, “Voyage dans les deux Amériques,” p. 170.

almost effaced, one may trace it by the numbers of villages which were formerly grouped along its track. Traces of it also exist in the shape of the villages through which it passed, which, instead of being grouped about their church as usual, were modelled upon the road, forming to-day a long empty street ; the fossil lining of the ancient road.

Another old route is that which used to lead from San Paolo to Minas, traversing from south to north the valleys which score the surface of the State of San Paolo. This also has gradually become effaced, but has had on the regions traversed an influence similar to that of the road to Ouro Preto. The land along its track was rapidly appropriated ; in fact, the old trails mark those parts of Brazil in which property has the longest history ; for it is along such routes that land first acquires a value.

What these ancient roads were like more than one well-travelled road of to-day can teach us. The provincial Brazilians have to fight against an adversary too strong for them ; a climate more hostile to roads than can well be imagined. It would cost, I will not say to install such a system of roads as we have in France, but merely to keep them in order, such a sum that the Federal budget and the State budgets would stagger under the load ; so the Brazilian resigns himself to making none but indispensable repairs, and, meanwhile, to using bad roads. Many are no more than mule-tracks, and the only transport on such is on the backs of mules or horses. The more important roads, however, allow of the passage of wheeled traffic. In those districts where large landowners are the rule, and where the proprietors themselves provide the transport of their produce, it is to their interest to see to the upkeep of the roads, in which case one never finds traffic arrested by their

impassability. It is otherwise in districts where small proprietors are in the majority.

I made the acquaintance of these rudimentary routes when at São Matao, on the Yguassu; I wished to reach the nearest railway station, about fifty-five miles distant. The most convenient and the most frequented route was the river; but the steamer was not due to depart for several days, and I was pressed for time. By dint of searching I discovered a driver, an imprudent person, who was willing to risk his cart and his horses in the attempt. The first day, having exercised prudence, we were upset twice; on the second day we journeyed slowly from slough to slough, foundering in each. The horses, coated with mire to the belly, exhausted by incessant effort, refused both maize and hay. Stanislas, my Polish driver, had no energy left, except to curse me. More than once I asked myself if I had not been wrong in despising the warnings of the village elders. If such is the lot of a traveller without luggage, furnished with good horses, it is obvious that commercial transport over such roads is utterly impracticable.

In many places the railway has replaced the old trails; it has killed them almost everywhere. Transport by road is so difficult that a railway obtains a *clientèle* directly it is opened. Before the official opening the public are already taking advantage of the line; profiting by it, quite shamelessly, in every possible way; installing themselves in freight trains, or crouching as best they can on the construction engines. Once the railway is constructed the administration no longer feels called upon to maintain the roads. The old road from Ouro Preto to Rio has disappeared from the face of the earth for lack of maintenance. In Paraná, a few years before the construction of the railway, a road had just been completed from Curitiba to the sea. It was called the Graciosa

Road. It was perhaps the best of all the highways in Brazil. I do not know that a penny has been spent on it since its completion ; repairs have been neglected, the bridges and embankments have foundered, and it is now impracticable from end to end. It is on account of their monopoly that the Brazilian railroads are able to maintain such excessive tariffs.

Sometimes, however, the highways have not disappeared before the railways : they have survived them ; for instance, on the table-land of Paraná. The persistence of the roads in this district is due to geographical and historical causes. Freight is abundant enough ; for from Ponta Grossa and from beyond Curitiba comes the whole crop of *maté*-leaves gathered in the western forests of the State. From Ponta Grossa to Curitiba the country is thinly wooded ; the highway passes only through a few open forests of pines. Now the forest is the enemy of roads. It attracts and holds moisture ; it prevents the sun from curing the evil done by the rains. If you have a journey to make, be sure that on leaving the woods you have accomplished the more difficult part. Once clear of the forest, the highway looks after itself, even without repairs. On the prairie the driver has also the great advantage of being able to make a diversion to right or left, thus avoiding a difficult stretch. When the road is worn out he changes it at will. Dwellers in prairie lands, like those of the Argentine, do not realise the problem of highway conservation. Paraná enjoys the same advantages. The soil consists of friable sandstone ; there are no deep ruts to founder in, and the drainage is rapid.

When, from the summit of one of the higher eminences of the plateau, one seeks to follow to the horizon the line of the highway, one sees, amidst the unblemished grasses, a space some hundreds of yards, or sometimes two or

three miles in width, along which the rising ground is visibly scored by the passage of wagons. There is no highway, but a wide belt which is used as a highway.

Traffic being therefore practicable, there sprang up a class of men who made an industry of transport, and claimed a living from the road. Without them the trails of Paraná would be extinct, as are those of other regions, and Curitiba would receive *maté* only by rail, as San Paulo does coffee. These transport drivers are not Brazilians, but immigrants of recent date; Russians who descended on Paraná in 1878; Russian by nationality, but German in their speech, having been transplanted from Germany to the banks of the Volga in the reign of Catherine II. First of all they attempted agriculture; but their first harvest, being poor, discouraged them, and while some dispersed in various directions the rest became carriers. So Paraná has its carriers; they are one of the most curious Brazilian types, these German wagoners whose tongue and whose trade give them a double peculiarity. They have their quarters in certain villages, where their families are settled. They have pastures around their houses where their oxen recover from the fatigue of their long journeys. I have often encountered their enormous wagons, heavy built, and covered with high grey tilts supported by wooden hoops. Their equipage consists of at least four yoke of oxen; sometimes horses are used. These are driven at night into the pasture of some wayside inn; for the *fonda* has also survived along the trail. There the carriers find, not lodging, for they sleep in their wagons, but maize for their cattle, and for themselves the evening meal. At such times I have spoken with them, receiving their confidences, seeking to divine some characteristics of their nomad minds.

Other trails that have not wholly disappeared before

the railway are the cattle-trails—the “drives” or “drifts,” to use an old English word. These exist in many parts of the country, and, as is only natural, they are most frequent in the great cattle countries, at the two extremities of Brazil : in Rio Grande and Ceará. As all the Brazilian states, including those whose wealth is now founded on agriculture, were originally cattle countries, all have their “drives”; but these have lost their animation in proportion as the pastoral industry has fallen into decay. In San Paolo, for instance, I know of none now existing. The old trails by which the herds of Matto Grosso or Paraná used to travel are scarcely practicable now.

Each canton produces, roughly speaking, enough cattle for its own needs, so that the transport of cattle is a matter of insignificance, and the consumption of the great cities is more and more assured by means of the railways.

The busiest “drives” are to-day to be found in the provinces where cattle-breeding is still the leading industry ; as in Ceará and Rio Grande. In Ceará the cattle are driven to the parts whence they are exported, and in Rio Grande to the slaughter-houses and the meat-drying establishments, along the wide trails which are full of animation at the end of spring, when the herds are in good condition. The competition of the railway with these trails is quite recent. Formerly the pastures on either side of the trails were not fenced in. The droves of cattle entered them freely and grazed at will. The drain upon the lands along the trails was heavy ; but the cost of transport was practically nil. To-day it is becoming the custom to fence the properties along the route, so that the necessary fodder has to be purchased at each stage of the journey ; as the shepherds who follow the sheep-trails of the Cevennes have to pay for grazing

their sheep. Expenses will thus increase ; and the railroad will replace the "drives," when once wire fencing is the rule in Rio Grande, as it is already on the Argentine Pampa. The migratory droves will travel by train, and one of the most picturesque chapters of the life of the Guachos will be closed.

There are now existing in Brazil some 11,000 miles of railroad. This is a small mileage if we bear the area of the country in mind, but it is already a large figure if we consider the sparsity of the population. In 1907, 425 miles of new track were opened to traffic. The density of the system varies greatly. The eastern half of the State of San Paolo is a gridiron of railways ; the basin of the Amazon has none. To be truthful, there is no general railway system in Brazil ; there are small independent systems, covering with their meshes the regions of long-established colonisation, but without inter-communicating lines. We may distinguish five principal systems, in the States of Pernambuco, Bahia, Minas, San Paolo, and Rio Grande do Sul. Between two only is there a connection : between the railways of Minas and San Paolo. The line from San Paolo to Rio is to-day the only means of transit between two groups of states, excepting the ocean highway.

Each of these local systems consists of a fan-shaped arrangement of lines, serving some particular region inland, and having its terminus at a seaport. The existence of the port is bound up with that of the railway.

The northern coast is poor in natural harbours. South of Cape San Roque it is bordered by a line of coral reefs which are cut by rare openings. One of these openings has determined the site of the city of Pernambuco. Further south the bays are numerous, wide, and safe. The only difficulty of the first navigators was to choose

among so many havens, and they often hesitated before deciding on the sites of their establishments. On the coast of San Paolo, for example, São Sebastião and São Vicente preceded Santos.¹

The early ports were merely roadsteads. At the end of the nineteenth century, however, something was done to give them a modern equipment. Santos, the outlet for the coffee of San Paolo, was the first modern harbour in Brazil. The quays at Rio are well on the way to completion ; harbour works have been commenced at Bahia ; at Pernambuco the harbour concession has lately been granted to a French business house. There remains the bar of the Rio Grande, giving access to the Laguna dos Patos. This is a sort of sandy estuary, open at one point to the sea : not unlike the lagoon of Venice, but larger. It has lately been decided to deepen the bar by dredging and to maintain the channel at an equal depth. When the work is completed the southernmost railway system of Brazil will possess, like the others, a harbour easy of access in all weathers.

In southern Brazil the railways uniting the ports with the inland plateau have everywhere encountered the same obstacle : the Serra do Mar. This range is a wall without gates. Here it has been necessary to scale a steep bank some 2,500 feet high. The construction of the lines which cross the *serra* has necessitated a great outlay of capital and prodigies of technique ; and there are few such lines. The contour of the land may be read in the plan of the railways. The lines that cross the *serra*

¹ The Portuguese *ão* denotes *ãon* with a nasal sound, but the word Saint is printed (and pronounced) San, not *Saon*, in the case of certain well-known ports, capes, or cities. The use of *San* is, of course, incorrect, but is so general that even in Portuguese journals one comes across the expression "San Paolo" instead of São Paolo.—(TRANS.)



PORTO ALEGRE : THE HARBOUR.



CROSSING THE SERRA : A VIADUCT.



branch off only on the further side of the ridge. This is exactly the opposite of the state of things to be observed in the Argentine, where the lines disperse in all directions as they leave the ports of Buenos Ayres and Rosario. The plains of the Pampa open freely to the seaboard ; but the Brazilian coast is difficult at the outset. In the Argentine the ports have prospered rapidly, and have themselves become capitals. In southern Brazil the ports, cut off from the hinterland, are ports pure and simple, each corresponding to some city inland. Santos and San Paolo form an inseparable couple, like Caracas and La Guayra in tropical America, or like Mexico and La Vera Cruz before the moral conquest of Mexico by the United States, when the former country was more actively connected with Europe.

The technical problem of crossing the *serra* has been solved in several ways. From Rio to Petropolis there is a rack railway. The central line of Brazil takes advantage of a valley of secondary importance, and attains the coast by means of loop upon loop. From Santos to San Paolo the San Paolo Railway Company has constructed a kind of funicular in several stages. But the most extraordinary line is that of Paraná. The *serra* is there steeper than elsewhere, and the line is suspended on the side of a vertical wall of granite, sometimes going through tunnels, sometimes carried over chasms. The difficulties of construction were such that it was necessary to abandon the works ; the young engineer who resumed them and brought them to a happy conclusion made his reputation by the work.

The majority of the means by which the interior is reached from the sea were effected at a time when the agricultural industries of the table-lands were scarcely in existence. It was impossible to foresee the brilliant financial results which have followed.

The most fruitful of these enterprises has been that which serves the State of San Paulo and has its terminus at Santos. The initial cost of a line across the *serra* being extremely high, no one cared to risk the construction of a second line, so that the San Paulo Railway Company has enjoyed an actual monopoly. When the plantation of coffee began to cover a larger area, new companies began to branch out across the plateau ; but all were grafted upon the trunk of the first, which was able to corner, without fear of competition, the enormous amount of traffic represented by the entire exportation and importation of the State. This company fixes its tariffs at will ; its profits are independent of the general prosperity or poverty of the country. The coffee crisis does not affect it. Whether sold at remunerative prices or thrown away at a loss, the coffee must be exported, and the San Paulo Railway pitilessly imposes the same tariff. The only preoccupation of the company at present is to limit its net profits to the figure above which it is obliged to restore a certain proportion to the State. It is therefore beginning to increase its expenses ; its stations are palaces ; its cars are appointed like drawing-rooms ; its permanent way is weeded like the paths of a garden ; and its employees, it seems, draw princely wages.

The management of the Brazilian railways varies greatly in different instances. The Government has often granted the concessionary companies a guarantee of dividends, without which they could not readily have obtained the necessary capital ; the guarantee is given on a fixed amount of expenditure per unit of length, and is calculated according to the mileage of the road. This form of contract has had disastrous results. The railway company so favoured has no interest whatever in taking the directest way between two points. On the contrary : it exhibits great ingenuity in realising the principle of

building the longest possible line at the lowest possible cost. It therefore avoids embankments and cuttings; and the track, following faithfully the surface contours, is drawn out in the most unreasonable meanderings. Public interest suffers; and the length of journeys is increased. But it is a bad business for the company itself if, after constructing the line, it has to guarantee the working of it; for a defective planning of the line will increase the expenses and may hinder the development of traffic. The Brazilian Government has now realised the danger of the guarantee clause, and in the last contract with the North-Western Railway Company, concerning the opening of a line from Itapura to Corumba on the Bolivian frontier, it has, while granting a guarantee of dividends per mile, set a limit to the maximum mileage of the line.

The various railway companies commonly dwell in mutual harmony. The territory of Brazil is so great that there are few causes of dispute; not being neighbours, they can hardly quarrel. A struggle between two railway companies is not, as it is in the United States, one of the ordinary distractions of existence. Yet it does sometimes happen that two rival companies will compete for the custom of a fertile canton. The Mogyana and Paulista companies have had such conflicts; their history is rather amusing. The Mogyana line used to serve the great coffee-growing centre of Ribeirão Preto. The Paulista company extended a line until it came into contact with the Mogyana line to the south of Ribeirão Preto, hoping to divert some portion of the traffic to its own system. This was what one calls, in terms of physical geography, in speaking of the structure of a hydrographic system, a capture. The higher reaches of the Mogyana were to serve to nourish the Paulista line. As a result, the Mogyana would have lost all its activity;

its trains would have run empty. The Mogyana line did its utmost to resist. It decided to organise a direct service of trains. The direct train stopped punctually at each station ; it missed only one—precisely the station at which the passenger must alight to take the Paulista train. So, willingly or unwillingly, to get from Ribeirão Preto to San Paolo it was necessary to content oneself with the Mogyana line.

The Federal Government owns and manages itself an important system of lines in the States of Rio and Minas ; the famous line from Rio to San Paolo makes part of this system. The Government is at present pursuing throughout the whole Federal territory a systematic policy of endeavouring to buy up the railways from the companies which own them. It does not intend to work them as State railways in the stricter sense, but to entrust the management to tenant companies. The Bahia system has been expropriated. The Rio Grande do Sul, also expropriated, has been leased to the Auxiliary Railways Company. Similarly the State of San Paolo, having bought up the Sorocabana Railway, has leased it to a Franco-American syndicate. The new Baüru line, in Bolivia, will be built by the North-Western Company for the Government, and the working of the line will be entrusted to the same company.

The present Government is endeavouring not only to reform the administration of the railways, but also to give unity to the whole system ; and to develop it according to a methodical plan. It proposes to construct several extension lines of general utility, which will serve the whole country. These gigantic proposals are of a kind to impress the public mind ; they have aroused great enthusiasm throughout Brazil. It seems to the mass of the people that the construction of these lines, which will unite the northern and the southern States

of Brazil, will make the national unity a palpable fact. Rio would be accessible by rail from all parts of the Union. At the beginning of 1908 the journals announced that Schnorn, the engineer, had just presented to the Minister of Public Works his report on the junction of the Minas railroads with those of Bahia. This junction once effected, the Bahia system would quickly be connected with the system of Pernambuco, and the whole plateau of the northern coast would be traversed by the railway.

Before this is effected a railway will connect Rio with Argentine and Uruguay. It was necessary to fill the gap between the railway system of San Paolo and that of Rio Grande by way of Paraná and Santa Catharina. This is the plan pursued by the San Paolo and Rio Grande Company, whose name is well known in France, where it has effected numerous issues of shares. The San Paolo and Rio Grande Railway is very popular in Brazil ; it will possess a great strategic interest, as it will allow troops to be moved rapidly to the southern frontier. Rio has not forgotten the difficulties that had to be surmounted during the war with Paraguay, nor how slowly—in default of highways—the Government was able to stifle the Rio Grande revolution of fifteen years ago.

Will the San Paolo and Rio Grande Railway suffer the fate of most lines of strategic interest—will it lack freight in time of peace ? I think not. At the same time, I do not think it will ever be a very busy line ; the steamers will always form a more advantageous means of transport for merchandise. As for passenger traffic, the railway between Rio Grande and Rio would certainly shorten the journey ; but the voyage by sea would still be more comfortable. One must have some experience of railway travel in Brazil : of the fine red dust which rises from the ballast of the track, which penetrates closed windows,

and makes the air unbreathable, in order to conceive of the fatigue and discomfort of a journey, entailing four or five days in the car, in the excessive temperatures which often obtain on the plateau.

The San Paolo and Rio Grande Railway will achieve a different kind of success : it will prosper in its several divisions by awakening to life the surface of the desert plateau. It will make the cultivation of the plateau possible and profitable : commercial centres will appear ; agricultural districts will spring up and supply them. Whatever product the plateau may wish to export—timber, for example—it will seek to gain the sea by the shortest route. This the directors of the undertaking have so clearly understood, that they have applied for the concession to build a transverse line which will cut the principal line at the frontier of Paraná and Santa Catharina. This will reach the sea at the port of San Francisco. This road from the plateau to the sea, which today, amid the general plan of the lines, has the appearance of a secondary branch only, will perhaps become the most vital part, the main trunk.

All the new lines in construction—the San Paolo and Rio Grande, the North-Western Brazil, which will shortly reach Bolivia, the Goyaz Railway, the Victoria and Minas lines—in spite of their slightly pompous title of international or inter-regional lines, and their claim to stand as the beginning of future trans-continental railways, in reality serve the essential purpose of opening up new regions to economic activity ; they are lines of penetration.

The Brazilians are building them in the open desert, according to the principle so often verified in the United States : that railways develop the country they pass through, and that the colonist, the merchant, and the manufacturer follow the railroad.

The construction of a railroad of this kind is not devoid of difficulties. The first contract fixes nothing precisely except the point of departure, the direction to be followed, and sometimes the mileage to be completed annually. As for the actual course or plan of the road, that is left indeterminate, in default of a sufficient topographical knowledge of the country to be traversed. Thus the first duty of the company entrusted with the undertaking is to determine the course of the road. In Europe the preliminary calculations for the construction of a railroad are made with the aid of maps. In Brazil the reverse method is in use ; the surveys of the railroad engineers are commonly the first precise documents obtainable relating to the conformation of a new district. A first staff of engineers is accordingly sent forward to effect a general survey of the ground. During this period of preliminary investigations information is gathered from all sources relating to the country to be traversed, and exploring parties are organised to cross it by different routes. According to the reports received the general plan of the system is determined.

It is of course desirable to serve the most fertile districts, and to choose the route which will ensure the most rapid development. Preferably the line will cross a river in the neighbourhood of a fall or rapids. The advantage is obvious : the navigable reaches both above and below will be equally dependent on the railway. The belt of country which the railway will vitalise, and which will yield the line its freight, is accordingly enlarged. For instance, the North-Western Railway will cross the Tieté at the falls of Itapura, and the Paraná at the falls of Urubupunga.

Above all, the engineers will seek to keep down the expenses. The Brazilian railways almost always avoid valleys, seek the highest portions of the plateau, and keep

near the lines of watersheds ; washouts are less frequent, there are no ravines to cross, and the building of the road presents fewer difficulties. Consequently the work of the first party of engineers consists largely in making a hydrographic survey of the country. When the higher contours between the different river-basins are known, the course of the railroad may be nearly guessed at.

A second survey party is despatched to establish the exact course of the line. In open country the task is easy ; in the forest matters are more complicated. The forest practically deprives one of sight ; one penetrates it almost by groping one's way ; neither level nor theodolite can be used. One tumbles into hollows that are only discovered when the ground gives way underfoot. The engineer in charge of the second party has to open up a trail through the forest, which follows as faithfully as may be the curves of the chosen contour. From the central trail he opens transverse paths, right and left ; if he has the feeling for such matters, and a long experience of the forest, he will be able from these trifling data to mark down his route in a satisfactory manner, and when, later on, an exacter knowledge of the land gives criticism its opportunity, he will find that there is not so much to be done over again.

Behind the second party comes the third, which performs the work of grading and building up the track ; then the fourth party, which lays the rails. I once passed some days at the railhead of the line in construction to the north-west of San Paolo, which, starting from the limits of the colonised lands, at the village of Bahuru, is progressing rapidly towards Matto Grosso and Bolivia.

The scenes I witnessed evoked Gustave Aymard, and the Wild West of the United States after the gold-rush to California. The railhead is the kingdom of adventurous characters. Isolation is complete : the little world at the end of the rails must suffice to itself ;

morally, at all events, for the line brings it provisions. Women are rare, and hardly exert their influence in favour of sweetness and light. There still live in the forests a few Indians who are persuaded that the invader of their domain is violating their rights, and who, from time to time, deliver a night attack, or massacre the sleeping labourers. Their neighbourhood serves as a pretext for the constant bearing of arms. The camp was picturesquely grouped on the sloping bank of a stream ; the store-houses of the company, in which provisions, spare tools, stores, and ammunition were kept, were built of logs or wattled boughs ; the men slept in tents or under the open sky. Somnolence and excitement reigned together, and a disorder which was not unpleasing. One cluster of men would be playing at cards ; a few paces nearer the stream another group who had erected a target in the shape of a bottle would be firing at it with their revolvers ; the card-players, absorbed, would be quite oblivious.

Of greater interest than such scenes as this is the immediate influence of the new railway upon all the country traversed. At one of the stations, opened some eighteen months earlier, an agricultural village had already sprung up in the midst of the forest. Colonists had secured the land there at a low price, and had cleared their fields ; already the railway had carried away the sacks of maize representing a first harvest. It is curious to note that the railway in process of construction does not make its influence felt only in the rear, when finally opened to traffic ; but also in advance, over all the country which it is to serve. Land to which no one had ever given a thought quickly finds an owner ; on the inhabited prairies cattle-breeding is at once commenced ; though the object of the farmers is less to raise cattle than to occupy the soil,

which will rapidly increase in value. The population which precedes the railway engineers consists of land speculators. It is true that mere occupation is no longer enough to establish property in the soil. The States no longer tolerate, as a principle, this usurpation of their territory. But there exists a host of bogus title-deeds; more still that are simply old or indefinite, drawn up when the country was practically unknown; and these may be interpreted in one sense as justly as in another. If the speculator can no longer occupy land without a title, at least he can still play tricks with titles of the kind I have mentioned; and business of this kind is done on a very large scale. The State, after all, has reasons for closing its eyes, since its object is to populate and develop new territories, and those who establish themselves in such territories serve to promote its designs. The rapid occupation of the soil in advance of the railhead affords us a notion of the way in which the land has been appropriated, during the last two centuries, along the line of the first trails and highways.

The fate of the railway is so intimately bound up with the development of the country which it serves that the Brazilian Government has been led by force of logic to make colonising enterprises of the railroad companies. The Federal law of 1907 relating to the population of the soil contains an entire chapter dealing with colonisation by means of transport companies. The choice of localities made by the company must be submitted to and approved by the Federal Government. The company is instructed to purchase the necessary lands, and is authorised to expropriate them upon occasion; it is also instructed to advertise the sale of allotments abroad; it will be expected to bear the cost of installing the colonists upon the ground, and will also be obliged to supply them with seed and otherwise to



THE LUZ RAILWAY STATION, SAN PAULO.

help them ; it must offer them day-labour upon the permanent way, and allow a reduction of 50 per cent. on its tariffs during a period of five years. The Government, in return, agrees to give immigrants a free passage from Europe to Rio, and to assist the company with its financial support. It agrees, in short, to pay a premium of £12 16s. for every house built by the railway, £6 8s. for every family established for more than six months ; and £320 for each group of fifty agricultural allotments occupied by foreign immigrants in possession of full titles to the property.

Similarly a number of recent contracts have bound the railway companies to create settlements or "colonial centres" within reach of their lines, at intervals of about twelve miles. The Government puts the land for this purpose at the disposal of the companies. Analogous clauses have been imposed on the Goyaz Railway Company, the San Paolo and Rio Grande Company, and the leasehold Sorocabana and San Paolo Company. I cannot say if the companies have accepted these clauses willingly. But apparently these duties will not entail any very strenuous efforts ; for even without such assistance villages would spontaneously spring up in the neighbourhood of the stations. The railway company has most to gain by the rapid population of the country it serves ; and Brazil is not the first country in which the Government has associated the railways with its colonising policy ; in this matter it has modestly followed in the steps of the United States and Canada.

CHAPTER IV

POLITICAL LIFE

The Constitution—The autonomy of the States—The Federal Government—Its increasing prestige—Brazilian Imperialism—The lack of true political parties—The Rio Grande opposition.

UNDER the Imperial Government Brazil was a powerfully centralised State. Under the system of government which was instituted after the Revolution of 1889 it is to-day a Federal Republic. Its Constitution has been based very closely on that of the United States of North America; the official title, the United States of Brazil, is in no way deceptive. The States—the one-time Provinces—enjoy a very large degree of independence. Each of them forms an actual nation, with its elected authorities and its autonomous administration. Their presidents and their ministers direct their financial policies, under the control of Parliament. They freely negotiate contracts with foreign companies or syndicates for the execution of public works or the raising of loans. They have their systems of justice, their systems of public education, and several of them, under the name of police forces, maintain what are practically armies. Some of them have representatives in Europe who play the part almost of diplomatists; who have been known to hold conferences and to sign conventions without the intervention of any Federal authority.

Their budgetary resources vary with their population and their wealth. The Constitution has afforded them an important source of revenue in allowing them to establish export duties and to employ them for their own profit. I believe there is no State budget which does not place export duties in the first rank among its receipts. The export duty on coffee swells the budget of San Paolo, as the export duty on *maté* swells that of Paraná. Thus Brazil has a double line of custom-houses ; one facing outwards, one inwards. The duties collected upon foreign merchandise entering the country—that is, the Customs properly so called—are a Federal matter, and depend upon the central Government ; but the export duties are State property. Just as there are two lines of Customs, so there are two species of contraband ; the Government is defrauded by smuggling in foreign merchandise, and the States are defrauded by smuggling the products of the country out of Brazil.

The export duties—like all kinds of imposts—have numerous opponents in Brazil. Theoretically the principle involved is dubious. They are reproached with striking heavily at production, when it would be wiser first of all to tax unproductive wealth ; and it is a fact that Brazilian exports consist almost entirely of agricultural products ; to tax these products is to tax the property from which they spring, so that the export duties reduce themselves in practice to an indirect property tax, with which one can find only one fault—that it does not affect urban property.

The chief advantage of export duties is that they are easy to collect. Goods are exported entirely by sea. The ports are few, and supervision easy. Brazil has no frontiers on land. This assertion may look like a paradox ; it is, however, perfectly true from an economic point of view, for the interior is still desert and without

roads, and all foreign trade is effected by way of the Atlantic seaboard. The only countries with which Brazil really comes into contact are the Argentine and Uruguay. The southern frontier is the only one across which a little smuggling is effected ; but nothing more than a few cargoes of *maté* cross the Paraná without paying duty. All things being considered, the leakage amounts to nothing ; the expenses of collection are very low, and the export duties form a species of impost perfectly adapted to a country which is still sparsely settled.

The property tax properly so called has none the less been introduced in certain States, such as Minas and Rio Grande. It is collected with difficulty, as there is no fixed registry of land. How can a land tax be imposed when agricultural wealth, in the full tide of development, has as yet no settled level ?—when the boundaries of cultivated lands are constantly moving outward ; when the area and location of the crops is modified yearly on every estate ?

In equilibrium with the States the Constitution erects the Federal Government : what is known in Brazil as the Union. The powers reserved by the Union are extensive ; there is a Federal army, a Federal navy ; all monetary questions are within its province ; and the Union decrees and applies the Customs duties on the imports of foreign merchandise. The State budgets are fed by export duties ; the Federal budget by import duties. By the regulation of monetary questions, which in Brazil are of the greatest importance, and by the settlement of the Customs tariff, the Federal Government exercises a deeply felt influence over the national life. Among other Federal services we must add the postal service.

At the outset the Union was very narrowly confined to these few functions. In the years which followed the

Revolution all the results of the latter made for decentralisation :¹ the States enjoyed their autonomy without let or hindrance. Two or three years ago a contrary tendency began to make itself felt ; both the authority and the dignity of the Union increased. In the first place the Union acquired its own territory—the territory of Acré,² which was ceded by Bolivia, by the treaty of Petropolis. This territory is a considerable portion of the Amazonian plain, and one of the chief rubber-producing countries. Instead of making a new State of Acré, it has been kept by the Union as a kind of dower. It is to Brazil what the Imperial territory of Alsace-Lorraine is to Germany. The Union collects the export duties on rubber, which duties, except in the Federal territory, go to the Treasuries of the States. The revenues of Acré were sufficient in three years to pay off the indemnity promised to Bolivia. To-day they are added to the other sources of Federal revenue, and form a notable addition to the Union budget.

The annexation of Acré is not the only recent success of Brazilian diplomacy, which has also obtained the rectification, in a sense favourable to Brazil, of the frontiers common to Brazil and the Argentine and to Brazil and Peru ; and in Guiana it has induced the French to recognise the contested territory of Oyapock as Brazilian property. These successful negotiations have won a widespread popularity for the Minister of Foreign Affairs, Baron de Rio Branco. This popularity has been still further increased by the intervention of Brazilian diplomacy in questions of international politics, and particularly in the discussions of the Hague Conference.

¹ This is not absolutely correct. The two first Presidencies resulted in insurrection because they were practically dictatorships, overruling State rights.—[TRANS.]

² Pronounced *ahkray*.—[TRANS.]

At the Hague Brazil took it upon herself to appear as the delegate of the lesser Powers to the greater. She especially asserted her right to speak as the representative of South America; for if Brazil has not as yet a world-policy she has at least an American policy, and hopes to establish her moral hegemony throughout South America. Such ambitions, vague as they are, find an echo in popular sentiment. During the last few years a kind of Brazilian imperialism ¹ has come to birth, and as diplomacy is a Federal matter the Union profits by the prevailing opinion.

At the same time the Federal Ministries of War and the Marine have increased their expenditure, and consequently their national importance. The public has willingly accepted the financial burden entailed by military power. I never heard any one protest against the orders for three ironclads of the latest type which were given to English builders while I was in Brazil; but it seemed to me that the new military law regarding conscription was less favourably received. As the voluntary system failed to maintain the army on a peace footing at the desired strength, the new law, voted at the beginning of 1908, enables the State to resort to conscription in order to fill up the gaps. The annual drawing of lots will provide the necessary number of conscripts. Conscription is rarely a popular thing. In Brazil the country districts have accepted the law without enthusiasm. Before it was voted I heard it spoken of during my travels, by colonists and Guachos, with dislike and anxiety. I think I have never experienced a welcome so glacial as on the day when, in seeking to explain my vague profession of perambulant geographer, I somehow, doubtless by a maladroitness phrase, gave the impression

¹ The word is used in the modern, not in the royalist, sense.—
[TRANS.]

that I was a recruiting agent, whose duty it was to draw up the lists employed in the *tirage au sort*. Even in Rio the opposition was considerable. But the agitation engineered by certain newspapers abated, and the law will shortly be put into effect. In strengthening the Federal army it will also strengthen the Union.

A short time ago the Union proposed to intervene in certain matters which, according to the Constitution, lie within the exclusive competence of the States. These interventions have been provoked by the weakness of certain State Governments and the inaction resulting from their weakness; they have always been cheerfully accepted, as they usually took the form of subventions. Two laws proposed in the Parliament of Rio are significant in this respect: the law relating to public education and the law relating to the peopling of the land. The first law authorises the Union to open and to subsidise schools on State territory; it will determine the curriculum of the schools and ensure their inspection through the medium of a Federal Council of Public Instruction; thus public instruction will no longer be left in the hands of the States. The second law lays before the Union the programme of a general policy of colonisation; it will establish immigrants not on the territory of the Union, but on that of the States; on the old public lands which were divided among the States after the fall of the Empire. Colonisation—that is, the allotment of public lands—is an expense, not a source of revenue. In strict logic this process should be the privilege of the States, as the domains of the Imperial Government have been divided among them; but in almost every case the States have neglected it. A national interest was at stake, and only the Union could accomplish the matter. The new law is, of course, an apparent revocation of the early Republican laws which had divided among the

twenty States the national patrimony of public lands. The Union does not become the proprietor of these lands, but it takes a hand in their distribution and supervises their employment. It had just received the royal dowry of Acre; one might say, with a little exaggeration, that the law relating to the settlement of the soil gives it a Federal domain in the heart of each of the States.

Neither this law nor the education law will take immediate effect. The Senate refused to vote the necessary supplies with the budget of 1908. But the very fact that both Chambers voted for these two laws indicates the new tendency of Brazilian opinion: the renaissance of the Union.

It is not easy to distinguish political parties in Brazilian politics. There are certainly political adversaries, but they rarely have distinct programmes. The majority of political questions revolve themselves into personal rivalry. Traditions are lacking. The old parties—Liberal and Conservative—whose rivalry lasted throughout the Empire, disappeared directly after the Revolution. Neither religious questions nor social problems are involved in matters of politics. In the north the opposition of the classes is marked by racial antagonism. In the south the working classes are of foreign origin, with neither cohesion nor discipline. Even in San Paulo their socialistic organisations have as yet only made a timid commencement. A large proportion of the population is indifferent; the negroes through puerility, the immigrants because they do not as yet feel definitely settled in the country. As for the ruling classes, the old Brazilian families, they live too much to themselves; the seductions of power are too strong to leave them the desire of forming real parties, faithful to a set of principles.

It is true that among those in power an intrigue will form about the nucleus of a name ; but only to dissolve as soon as formed. The time most fertile in political dissension is the time of preparation for the elections, Presidential or otherwise. But the opposition is always intermittent ; it has no underlying doctrine. It does not represent tendencies opposed to those of the men it opposes. It sometimes manages to extend its influence by exploiting the unpopularity of some particular measure. At such times it produces the illusion of an actual force ; but the agitation soon calms down, and its power crumbles away.

The Government of Senhor Rodriguez Alvez, which preceded that of Senhor Penna, had to overcome a sudden movement of opposition, which in Rio resulted in actual rioting. The crowd had nothing to do with the plotting of a small group of politicians ; it was even in ignorance of their plot ; but its momentary complicity was assured by arousing its feeling of irritation against the sanitary reforms which the municipality of Rio was then introducing, under the direction of the eminent physician, Oswaldo Cruz. The Health Department had, in fact, undertaken to rid the city of the yellow fever ; and, following the examples of the Americans in Havana, it was in process of undertaking an enormous labour of cleansing and sanitation, and was waging war upon the larvæ of the mosquito. Every case of contagious illness was to be declared, and the municipality required the disinfection of the contaminated apartment. Moreover, vaccination was made compulsory.¹

These methods had the most rapid results ; mortality diminished, and the yellow fever disappeared. It no

¹ It has, one presumes, been evaded, as while there were only four deaths from yellow fever in Rio in 1908, there were 6,500 from smallpox.—[TRANS.]

longer exists in Brazil except in the basin of the Amazon. Notwithstanding these facts, the crowd regarded with hostility the officials entrusted with the disinfection of the houses, who went everywhere distributing their gift of health, whether the people wished it or not. They were nicknamed the *mata mosquitos*; they were covered with quibbles and ridicule; but these things might have been overlooked; the *mata mosquitos* might have gone on pursuing their duties in an atmosphere of disdain and dislike, yet of general docility, had not some one conceived the idea of exploiting the public discontent for the profit of a political faction. The rising was futile and objectless, and, the preconcerted outbreak having miscarried, it died a natural death, without having aired any question whatever of politics.

One problem only might create a division of public opinion, and so give rise to parties: the constitutional question of the Federal authority as against the autonomy of the States. The revolution which instituted Federalism encountered no opposition. Some, however, disapprove of the Federal Constitution; it has, they say, disorganised Brazil. The administration ought to be more centralised. The Union Government ought to have a representative in each of the States: to name a sort of prefect; whereas the State Presidents are to-day independent and elective rulers.

There is one state in which the Unitarian party is a living thing: the State of Ceará. This party has a journal, the *Unitario*. One might derive, from the columns of this paper, the elements of a coherent doctrine.

The economic situation of Ceará explains why it should be the stronghold of a Unitarian party. Afflicted by extreme poverty, devastated by periodic droughts, it needs the assistance of a strong and active central Government. The motto of the Republican revolution

was : *The States Independent*. The necessary corollary is that the States must supply their own needs out of their own resources : they must hope for no external help.¹ The central Government has fewer obligations as it has less power. It is this result of the Federalist doctrine that Ceará is unwilling to accept.

At the other extremity of Brazil—in Rio Grande—there is another opposition party, which calls itself a Federalist party. What part did the constitutional doctrine—whether Federalism or Unitarianism—play in the murky and complicated exciting causes of the revolution of Rio Grande, which stained with blood the first years of the Republic? It is impossible to say. The revolutionists included Imperialists, attached to the Empire by personal loyalty, and hostile to the new Government. By their side fought the Separatists, the extreme Federalists, who desired the complete independence of the southern provinces.² But in classifying the party elements in this way we are apt to exaggerate the part which ideas and principles played in this movement. To-day the Rio Grande opposition is founded less on political doctrines than on warlike memories of the Revolution. Whatever may be its prevailing sentiments, it is still strong in numbers and vitality ; it is by no means a cause without an army ; conquered after three years of civil war, it is still in arms. I was in Rio Grande

¹ The general effect of Unitarianism under such conditions would be an artificial distribution of the population, upheld only at the general expense, except in such districts as could be made permanently fertile by an initial development. Separatism makes for a natural distribution of the population ; but this virtue may be counterbalanced by such (not inevitably permanent) disadvantages as provincialism, corruption, disloyalty, &c.—[TRANS.]

² It must be remembered that all these tendencies were aggravated by the military autocracy of Fonseca and Peixoto, and the attempt to override the State-elections.—[TRANS.]

at the time of an electoral campaign, and I was able to see how fiercely the political passions are still burning there. The neighbourhood of the Argentine frontier—the only spot where Brazil comes into actual contact with a military and ambitious neighbour—evokes a belligerent atmosphere. Rio Grande is the Lorraine of Brazil ; and a little of its warlike ardour enters into its political struggles.

CHAPTER V

THE ECONOMIC LIFE OF BRAZIL

Protection—The Customs tariff—General characteristics of the economic life of Brazil—Distribution of agriculture and industry—Economic history—The export trade in sugar, and the cattle industry—Produce of modern Brazil—The exportation of coffee and rubber—Commercial relations between Brazil and the United States—The economic unity of the country.

ALTHOUGH we may find in Brazil profound and general differences of opinion, these differences relate not to politics, but to matters of economics. Free Trade and Protection are among the subjects most frequently discussed. Protectionist theories have their way in the official world. They have been methodically applied, and applied in very different fields.

We will examine the numerous forms which Protection has assumed in San Paolo, as affecting the culture of coffee. Protection is consistent with all the characteristics of the Brazilian. The administration is powerful, and he regards it as a matter of course that this power should be employed to support his private enterprise.¹ Yet the contrary doctrine of Free Trade is

¹ The other side of this question is the immense cost of living in any but a rural or Brazilian fashion. All articles of luxury are so dear that those who can afford trips to Paris make their expenses by what they save on their purchases—a seductive if sometimes mischievous kind of economy.—[TRANS.]

by no means without a voice. Many a Brazilian profits by the protection which the Government has granted his industry, in so far as he is a producer; but as a consumer he suffers from the protection which the Government has granted to other branches of industry carried on by his fellow-countrymen. Employees at fixed salaries, and small officials, whose wages are not elastic, and who derive no personal advantage from the existence of the Customs tariff, are naturally enemies of the Protectionist *régime*.

But the reign of Protection is not seriously threatened. The Customs in Brazil perform a double service: on the one hand, they seek to preserve the national market for Brazilian industries, and on the other they fill the Treasury. They profess to be an instrument of economic progress; they are also a budgetary necessity. This guarantees their preservation. They will not be suppressed; their tariffs cannot even be sensibly lowered until other sources of revenue have been discovered; so the discussions which rage around them are of a character almost wholly Platonic.

Whether permanent or ephemeral, the Federal Customs are to-day a power. The duties are extremely high, and affect not only articles of luxury, but articles of daily consumption and ordinary use: even the tools and implements of the industries which are struggling for a foothold in the country.¹ Hence they appear to oppose their own primordial object, and to burden the general development of the country. Each year, accordingly, fresh discussions break out, relative to proposed amendments of the tariff, whether designed to decrease duties or to raise them.

The annual commercial supplement of the *Jornal do*

¹ This foolish duty has been reduced by Peçanha to a 5 per cent. *ad valorem* duty in many cases.—[TRANS.]

THE ECONOMIC LIFE OF BRAZIL 131

Commercio for 1908 contains some interesting observations on the subject of the Customs policy.¹ "Our legislators," says the *Retrospecto*, "are of a different opinion to the legislators of other South American countries, and economists in general, who consider that, in a fertile agricultural country where agricultural produce and sub-products are abundant, the absolute protection of growing industries and manufactures—what we may call deminational industries—is the one great obstacle to the increase of the public revenues and the wealth of the inhabitants. One man is favoured at the expense of a thousand; a state of affairs that is not consistent with ordinary justice, and still less with a sane doctrine of political economy."² The writer goes on to show that the term "protection" can hardly be applied to the Customs policy of Brazil, since more often than not the industries which Protection professes to protect do not exist even in embryo. "We burden almost prohibitively," says the writer, "all woven fabrics of silk or wool; yet the industry of sericulture is unknown to us, and we raise no sheep; we have a heavy duty on umbrellas, while the Brazilian makers import, paying very modest duties, the handles, the frames, and the silk, cut into triangular pieces, so that the *national manufacture* of umbrellas consists merely in assembling their component parts. There is a heavy tariff on printed wall-papers; the few Brazilian makers of this article import the un-

¹ The *Jornal do Commercio*, the leading Brazilian newspaper, publishes annually, under the title of *Retrospecto*, a study of the chief economic and financial events of the year, and of their influence on the Rio market. It is a convenient guide, which enables one to follow step by step the history of Brazil.

² It will be found that many South American economists are still believers in the "mercantile idea," and the rigid significance of the "commercial balance," which began to give way to more correct ideas some two centuries ago.—[TRANS.]

printed paper in rolls, often already coloured with a ground tint." Similarly the national manufacture of matches is protected; yet, although Brazil is covered with unexplored forest, the makers import the wood, cut into spills or sheets, from Norway. One might multiply such instances interminably.

In studying the recent progress of Brazilian industries, we must never forget that they have come into being under a system of the extremest Protection. Many branches of industry have prospered solely through Protection. The weaving of cotton, for instance, has developed in a striking manner, and we are in sight of the time when Brazil will no longer buy English cotton-stuffs. Brewing and soap-boiling have also largely profited by Protection. Except in the two capitals, Rio and San Paolo, factories are rare; no part of the country can be regarded as an industrial centre. There is nothing to recall the industrial concentration of the United States. In the latter country transport offers no difficulties; the factories are grouped together wherever the conditions are most favourable to production. Their products are distributed over a world-wide market. In Brazil, on the contrary, industry is dispersed in the extreme. One finds tiny factories in small straggling villages which one would never guess beforehand to be industrial centres. The immensity of the country and the cost of transport create for each such factory a kind of protected zone, within which it enjoys an absolute monopoly. The cost of transport is in fact so high, increasing so rapidly with distance, that it soon surpasses the value of the merchandise. Factories are therefore established wherever customers exist, each factory having its own circle of consumers, upon whose forced fidelity it may rely.

The same causes have had similar results in respect

THE ECONOMIC LIFE OF BRAZIL 133

of Brazilian agriculture ; agricultural dispersion echoes industrial dispersion. Alimentary products are grown everywhere ; they have persisted even in the regions of more profitable cultures ; in San Paolo amidst the coffee plantations, and in Pernambuco amidst the sugar. Not each hamlet only, but each family, has its field of manioc and of maize. In many rural cantons manioc flour and maize, which form the greater portion of the diet of the lower classes, are nevertheless not articles of current exchange ; each household gathers its own crop.

As a result of the difficulty of communications, and also, perhaps, of the defective organisation of trade, Brazil is far from forming a national market. Her territory may be decomposed into a host of little isolated markets, each independent of the other, each sufficing to itself. If the prices vary, neither rise nor fall affects the outer world. In Rio I find the sugar-planters in a state of joyful excitement : in a few months the price of sugar has risen by 100 per cent. Two days later I land in Paraná ; there, in the narrow tropical belt of sea-board, are a few sugar-plantations, whose crop is sold on the plateau ; not in the shape of sugar, but as "brandy," *aguardiente*, or, strictly speaking, rum. The local crop of cane is abundant, the owners of the sugar-mills at the foot of the *serra* are grumbling at having to sell their spirit at far below its usual price.¹ Similarly the price of coffee will fall in San Paolo and in Santos, until the Paulist coffee industry appears in

¹ Besides being grown in the great sugar centres, the sugar-cane is a staple crop in Brazil. It is most often used, not for the manufacture of sugar, which calls for a costly plant, but for the production of an alcohol, or sometimes a crude kind of sugar known as *rapa dura*, which is sometimes a kind of molasses, sometimes a sticky cake-sugar.

actual danger, and the State undertakes the perilous business of running up the prices to save the planters. Yet in Ceará there are only a few growers, who can barely supply the consumers of the State; who are selling an inferior coffee at double the usual prices, and know no other anxiety than the fear that the drought may threaten their crops. Such contrasts are frequent. If such is the case with luxuries like sugar and coffee, what of the heavier products, whose transport is still more costly?

The limitation of the markets renders the economic life of the country unequal and ill-adjusted. It exposes it to continual partial crises which naturally check its development. When production exceeds consumption the local market cannot unload itself upon the neighbouring markets, in which the producers would perhaps receive better prices, since these, on account of the cost of transport, are shut off, as it were, by water-tight compartments. Prices accordingly fall, without any possible remedy; immediately production is limited and becomes insufficient; then prices rise, and there is no importations from without to limit their rise. Re-awakened by better prices, production is once more stimulated; and its very improvement provokes a new crisis. I found the settlers of Paraná accustomed and even resigned to the sudden leaps of the market, which they had come to regard as a normal and inevitable state of affairs. They live, therefore, always in a state of uncertainty, never able to foresee what will be their resources for the coming year. The spirit of saving has decayed among them. In the same way wholesale trade used to suffer formerly from the extravagant variations of exchange. The Brazilians have at last come to understand the dangers of such conditions. There is only one remedy: to improve the means of communication.

THE ECONOMIC LIFE OF BRAZIL 135

The great question of Brazil is above all a question of roads.

Life is dear in Brazil. Every stranger, upon his arrival, suffers the same painful impression. Allowing for the ignorance of the new arrival, who as yet knows nothing of the customs of the country, and often refuses to adapt himself to them: the fact still remains. The French, steeped, by heredity, in the spirit of economy, resign themselves to such conditions with difficulty. If two Frenchmen meet in Brazil, be sure the conversation will drift into complaints of high rents, or the prices of the restaurants, or the cost of hiring vehicles. But all things are not equally expensive. For example, the hot climate not only allows one to furnish more simply, and so reduce the expenses of setting up house: it even makes such a simplification desirable. It is perhaps in the matter of clothing that prices seem to a European most exorbitant. A Brazilian of moderate income, economical in his habits, and living in the city, will spend on his clothes about a third of his income. Upon this particular point I made a careful if unmethodical research.

The cost of living is not the same in all the provinces. It is exorbitant in the basin of the Amazons, where the inhospitable climate has arrested immigration, where labour is costly, where nothing is produced on the spot, and all articles of consumption are imported from without. In the settled regions of southern Brazil it is not nearly so high.

The Protectionist system is the most obvious cause of high prices. There are other causes, however, of which the first is the scarcity of capital. The ordinary rate of interest, on perfectly safe security, is hardly ever lower than 10 per cent. The charge on first mortgages is 12 per cent. Every manufacturer, every one interested

in industry, has to submit to these conditions; and it is, of course, the consumer who pays. The rent of the house or apartment in which you live is high simply because the house was built with money borrowed at 10 per cent. The shop-keeper across the street pays an equally exorbitant rent, and accordingly increases his retail prices. In this manner the rarity of capital makes itself felt in a thousand ways.

Another cause, less obvious but no less real, is the actual indifference of the Brazilians to expense or extravagance: their horror of trade and their prodigal habits. These characteristics are explained if we remember that the population is largely rural. City life is a thing of recent growth; the habits of a methodical and economical urban existence have not as yet been formed: there has not yet been time. In the country rich and poor lead much the same life. So long as the planters remain on their estates they have no occasion for personal expenditure. If business or pleasure take them to the city, it is at most only for a few days. More often than not they are personally unknown in the cities; and the simplest means of inspiring respect and esteem is to spend royally, in good, ringing coin. Considerations of economy are needless; the purse once empty, they have but to return to their houses and their fields. They do not like calculation; they prefer not to count the expense. During the few days of comparative idleness which they pass in the city they display a tendency to prodigality which gains by contagion on the people of the city.

More than one city owes its rapid progress to the liberality of the *fazendeiro* on his holiday. Ribeirão Preto, which dates from the dawn of the boom in coffee, and which grew during the period when it sufficed to grow coffee to obtain credit, acquired the reputation of

THE ECONOMIC LIFE OF BRAZIL 137

a place for spending money, a city of expensive luxury ; a city of pleasure, from which boredom and economy had been banished at a blow. To-day that Sodom, scourged by poverty, is suffering, as are the surrounding regions, from the ruinous coffee crisis ; but there lingers yet a trace of the old manner, and the same may be said of Rio and San Paolo.

It is time briefly to study the economic life of Brazil.

At the beginning the chief export of the country was sugar. San Salvador, better known by the name of the State of which it is the capital—Bahia—and Recife, the capital of Pernambuco, were the first sugar-producing centres. The old geographies represent Bahia, and more especially Recife, as cities already important, at a time when all the rest of the European settlements were no more than small and isolated factories. Yet even at the beginning Bahia and Pernambuco did not represent the whole of Brazil. Beyond the sugar-producing provinces, and besides the mining districts, certain portions of the interior were settled at a very early date. Almost the sole occupation of the settlers was the breeding of cattle. Brazil became a huge and primitive ranch, where the cattle, imported from Portugal, lived uncared for and almost wild, degenerating into a fleshless, bony breed ; savage, but feeble in the yoke. The breeding of cattle is, indeed, the first means of extracting a living from the soil. It requires little capital, little labour, and will go hand in hand with the most primitive commercial organisation.

A double outlet was available to the breeders. To begin with, the population, especially in the towns or on the great plantations, in the absence of fresh meat, which was difficult to keep, quickly grew accustomed to

living on *buccaneered*¹ meat, dried in the sun ; further, the cane-growers asked for oxen, not to labour in the cane-fields, where none but human labour was employed, but for purposes of transport. The ox has never been used for other agricultural purposes, from the dawn of colonisation down to the present time. A belt of pastoral country soon encircled the agricultural provinces, and the radius of this circle was far longer than is supposed. It is a strange state of things to look back upon : the vast sweep of Brazilian soil given up wholly to the production of cattle for the consumption of a few insignificant cantons !

The area given over to the raising of cattle would have been far less extensive, if a method had not been employed of which the equivalent is found in use to some extent in almost every part of the world. The cattle could not be driven directly from their native pastures to the centres of consumption ; the distance was too great. The journey was made in two stages. The remoter graziers made the first stage in several months of leisurely travel ; they would then sell their herds to other graziers, who allowed them to rest and fatten in other pastures ; after months of repose the herds resumed the trail, and finally reached their market. These wandering, far-driven cattle were the product of the distant savannahs ; the only form of the product which could be transported. The cattle grew old on the road. Starting as young steers, almost as calves, they were adult ere they reached the end of the journey ; the end which for some took the shape of the skewers on which their salted flesh was

¹ Hence the term *buccaneer* ; the early cattle-raiders or pirates of the Amazonian islands and the Caribbean Sea keeping herds of stolen cattle for their maintenance, whose flesh they dried in the sun. Such meat is the *jerked meat* of the States, the *billong* of South Africa.—[TRANS.]

dried, and for others the wagons of cane to be drawn between the cane-fields and the mill. Between the various provinces there was a kind of division of labour; the more remote undertook the actual breeding of cattle; the nearer saw to their fattening. San Paolo, for example, received from Matto Grosso, from Paraná, and even at times from Rio Grande, the cattle which were kept a year before they were sold at Rio or in Minas. The gold received to balance the exportation of sugar was in this way scattered over the face of the whole colony; the interior, on account of its cattle, receiving its slender portion.

This early pastoral settlement of the country was doubtless sufficiently sparse. The market was too limited, the outlets too restrained, to support a numerous population. But the pastoral life was almost wholly self-supporting. The herders, clothed in hides, lived on dried meat, cheese, and the produce of a few annual crops, for a little necessary agriculture was carried on; they rode unshod horses, and lived in almost absolute independence of the world. They were accordingly more numerous than we should imagine from the number of cattle sold at Recife or San Salvador. Being the first colonists, they were also the first enemies of the forest, which they burned wherever they could, in order to enlarge their domain. It was at them, and not at the sugar-planters, that the first measures which sought to stop the burning of the forests were directed in the eighteenth century.

Cattle breeding was thus the first occupation of all the provinces; all have passed through the stage of pastoral wealth; all have known the time when every man's fortune was reckoned by the size of his herds. To one who knows the *fazendas* which to-day cover the State of San Paolo, with their immense plantations of coffee,

it is surprising to read in d'Orbigny, who travelled in Brazil only sixty years ago, that the principal wealth of the Province of San Paolo consists in the raising of cattle."¹

The present economic organisation of Brazil is more complicated. Sugar is no longer in the first rank of exports ; it has been replaced by coffee. The ups and downs of the Brazilian export trade correspond to-day with the good and bad coffee harvests. As coffee has taken the place of sugar, the south of Brazil has won from the north its former economic preponderance. The great coffee-growing centre is, in fact, San Paolo. In average years its yield of coffee amounts to two-thirds of the total yield of Brazil, and to half of the whole world's harvest. The San Paolo coffee is dispatched from the port of Santos, while Rio exports the less abundant and more widely distributed crops of the State of Minas ; the few plantations of Espirita Santo load their cargoes at Victoria. In the rest of Brazil coffee is not an article of export.

Two other agricultural, or, rather, natural, products are also of great importance as exports : rubber, which the basin of the Amazon exports to Europe and to the States, and the *maté*-leaf, which Paraná sells to the other South American countries, but especially to the Argentine and Paraguay. To these we must add, as exports, cotton, raw hides, and various tropical products, such as cocoa, hardwoods, &c., which are dispatched from a large number of ports, being the products of many States ; and we have an almost complete list of the articles which Brazil sells to the outer world.

Every year a wave of gold enters the exporting States. But it does not as a whole remain there ; the channels of domestic commerce distribute it among a still larger

¹ D'Orbigny, "Voyages dans les deux Amériques," p. 179.



A MATÉ CAMP, PARANÁ.



A SHEEP-RUN.

THE ECONOMIC LIFE OF BRAZIL 141

number of provinces. Many of these latter, which dispatch but few foreign exports, sell their produce to other Brazilian States. These currents of internal trade have a twofold importance: they ensure the distribution of wealth throughout the whole country, and by creating ties of mutual dependence between the States they form the firmest foundation of national unity.

The two chief sugar-growing centres, Pernambuco and Campos, in the State of Rio, have seen their principal market transplanted in the course of the nineteenth century. The foreigner is no longer their principal client; it is at home, in Brazil, that they sell the greater portion of their sugar. The great buyers of Campos and Pernambuco sugar are Para, Rio, and San Paolo.¹ In following the Brazilian coast in a coasting-vessel, whether it be sailing south or north, one is certain, at Pernambuco, to see a cargo of sugar taken on board. The sugar market of Rio is to a great extent independent of the international market. But if the crop in Pernambuco fail the prices will rise considerably.

The State of Minas finds an abundant source of wealth in provisioning the city of Rio. Rio has to-day about 800,000 inhabitants, and the population is rapidly increasing. Built on the sea-shore, in the midst of a tropical forest, it has been unable, like most cities, to surround itself with suburbs and parks and belts of nursery gardens. It has to look across the Serra do Mar for its provisions.

¹ In 1906, it is true, Brazil sent delegates to the Brussels Conference, who endeavoured to induce England not to exclude Brazilian sugars. But although the merchants of Pernambuco (the factories of Campos never export their products) were anxious to have an open market in London, it was in order that they might place there, in case of necessity, an excess of production which would bring down prices if it remained in Brazil. Brazil is their ordinary market.

The railway bring it every day, from distant sources, milk, vegetables, and meat. The feeding of the capital is a lucrative industry for the State of Minas, and since the coffee crisis it has given itself entirely to this task. Every *fazenda* fattens pigs which are meant for Rio. The Mantiqueira has become an important centre for dairies and cheese-factories, and the Minas butter is now disputing the Rio market with the Norman salt butter, which is sold in little tinned-iron boxes. As civilisation is pushing further north, this distant suburb of Rio enlarges its limits. Already it has passed the boundary of the forests, and is penetrating the bush to the north of Bello Horizonte, where a drier climate permits the growth of the products of the temperate zones; the Minas potato is now beginning to make its appearance in Rio.

The old pastoral industry, which once occupied all Brazil, is now confined to a smaller area, and has become more intensive. As oxen are not employed in agriculture in the strict sense of the word, but only for the transport of agricultural produce, it results that the pastoral and agricultural avocations are only combined where the cultivator undertakes his own transport—that is, only on the very large estates. In San Paolo, for instance, every *fazenda* has its cattle, and often its bulls and cows for breeding; its pastures, and its field of cane, which furnishes artificial fodder.¹ At Minas the same arrangement usually obtains. But in the districts where small crops and small properties are the rule there are

¹ In the Argentine the two industries are allied with great profit, lucerne being sown, and employed both as a pasture and as a dried fodder; the field then being ploughed will produce several vigorous crops, after which it is again treated with lucerne, the leguminous roots of which fix nitrogen in the soil. Probably this method will spread to the more temperate parts of Brazil.—[TRANS.]

no cattle ; the settler of Paraná or Santa Catharina does not employ oxen ; the only domestic animals among the colonists are the saddle-horses.

On the prairies of Rio Grande, on the contrary, the cattle reign undisturbed. One of the most curious characteristics of Brazilian life is the striking contrast between the pastoral and agricultural districts. We shall have occasion to refer to this frequently. Other occupations, other manners. Cattle-breeding and agriculture do not mingle as they do in Europe. If the agriculturists possess no cattle, the cattle of the pastoral countries—those, for example of the Rio Grande—are in no sense domestic animals ; their nature is anything but pacific, and they are neither the servants of man nor the companions of his labour.

The raising of cattle on the prairies of Rio Grande is carried on solely with a view to the production of beef. The salt meat exported from the harbour of Pelotas is consumed throughout all Brazil. Rio Grande provides this article of export. During the season of 1907 her slaughter-houses dealt with 1,400,000 head of cattle, all destined to be dried and salted. While the southern portion of Rio Grande, which is given over to cattle-raising, exports this *carna seca*, the region of the settlements, which stretches to the north of the prairies, is beginning to sell its wines and its fattened pigs in the neighbouring States.

We see that the economic relations between the various regions of Brazil are becoming more complex. They have been becoming so ever since colonial days ; they will in time become more perfect. We can easily foresee, for example, the time when the salt deposits of Rio Grande do Norte and of Ceará will supply the drysalteries of Rio Grande, which will then no longer buy their salt in Cadiz. Again, the pines of Paraná will one day replace

the cargoes of Norway deals which are still unloaded at Rio and at Santos. Finally, will not southern Brazil be able before long to supply the wheat flour which at present is imported from the Argentine? For thus not only would new ties originate between the States, but Brazil would be able to reduce the tribute which to-day she is forced to pay the foreigner.

CHAPTER VI

MONEY AND EXCHANGE

The commercial balance and the importation of gold—Paper money—Excessive issues—The depreciation of exchange and its gradual recovery—Opinions upon exchange—Supporters of high and low exchange—The speculation in exchanges at Rio—The fixation of the rate of exchange and the Caisse de Conversion.

IN every country the movement of exchanges with the outer world is settled annually by an importation or exportation of gold. In the case of a young State, such as Brazil, whose metallic reserve is as yet insufficient, it is of extreme importance that the commercial balance should be favourable. It is true that it is not enough to compare the Customs statistics of imports and exports. To know whether the wealth of Brazil is increasing or decreasing we must take other elements into account; for while, in the case of Brazil, we find no factor beyond her exports which could cause an influx of gold, we find a number of factors which may force gold to be sent out of the country.

In the first place, Brazil sends abroad annually, and especially to England, a sum which represents the interest on the foreign capital which has been lent her. What precisely is this sum? We know exactly what the service of the State loans amounts to, but we do not know what sum Brazil has to pay in dividends to foreign

companies or syndicates. Take, for example, the London and River Plate Bank. It does business both in the Argentine and in Brazil. What proportion of its dividends comes from Brazil, and what from the Argentine ?

It is still more difficult to judge the sums which Brazilians spend while travelling abroad. One consequence of Brazilian Protection is that not only does a Brazilian traveller spend abroad his travelling expenses proper, but he profits by his passage through Free Trade countries to buy, as advantageously as possible, those articles whose price is excessive in Brazil ; and in particular articles of clothing. I remember that I was much amused, when on shipboard, on our arrival at Barbadoes—an English island, therefore free-trading—where the liners put in on their way from Brazil to the United States. All the passengers spent the few hours of our stay in making purchases. A large dry-goods merchant had founded an establishment there, where he sold all kinds of stuffs—underclothing, fancy goods, novelties, &c.—having, as almost his only customers, these birds of passage who come from a protected State and go to another protected State. Every one cheats the Federal customs for all he is worth. The Brazilian profits by his stay abroad to equip himself at a low cost. He starts for Europe with his trunks empty ; he returns with them full. Here we have a sort of importation in disguise ; and this too represents an efflux of gold from the country.

Finally, the agricultural labourers of foreign origin, the newly settled immigrants, send home each year a portion of their savings ; the total is unknown, but it is certainly a large sum. The Commercial Italian Bank of Brazil, whose headquarters are at San Paolo, the centre of the Italian colony, declares in its reports that in 1905 it sent to Italy, in the name of the Italian agricultural labourers,

more than eighteen million lire, and nearly seventeen million in 1906;¹ or, with exchange at 25, £720,000 and £680,000. Now, the Commercial Bank is by no means the only channel by which the savings of the Italian labourers can reach Italy.

Thus one cannot calculate *a priori* the annual variations of Brazilian wealth. It is just as impossible to estimate them *a posteriori*; to be sure, the statistics give us the importations of gold, but there is no means of discovering how far this gold represents profits earned, and how much is imported in virtue of loans contracted abroad, in the shape of advances which will later have to be repaid.

If I think it possible to affirm that Brazil has certainly grown more wealthy during the fast few years, it is because I am going by an almost infallible index: the high rate of exchange. As a matter of fact, the question of exchange is intimately bound up with that of the commercial balance. It is the basis of the economic life of all Brazil.

Gold coinage is not in circulation in Brazil. The only current money is Government paper. This paper currency is at present subject to a very great depreciation. The Brazilian Treasury is at present incapable of keeping the promise inscribed upon the notes: that is, to exchange gold for it at the demand of the bearer. The ratio between the actual value of paper, expressed in terms of gold, and its face or nominal value, is what is known as "exchange." We say that exchange is rising when this ratio increases; that is, when the value of paper is greater; when it is less, we say that exchange is low.

¹ The sums dispatched in these two years were particularly high, owing to a rapid increase of the rate of exchange. The immigrants profited by this rate to send their savings to Italy, so the sums dispatched cannot have maintained this level.

The variations of the rate of exchange may be considerable. For paper money to remain at par—that is, to retain its face value—the issue of paper must be in proportion to the guarantees which it represents. A bank only issues fresh notes as its reserves or its transactions increase. In Brazil, where the question is not of bank-notes but of State notes, the total of these notes ought not to exceed the liquid wealth of the nation.

France has passed through monetary crises so severe that paper has been discredited practically to the point of losing all power of purchase ; 100 livres in assignats (their face value being £4) was at one time in her history rather a shabby tip to give a servant. Brazilian paper has never fallen as low as this. In the interior, indeed, paper money has always retained practically the same value. It is astonishing to me how little the variations of exchange have affected current prices expressed in paper. It is not from the domestic point of view that the question of exchange is an acute one ; the paper currency has performed its service as a means of national exchange ; it is its international *rôle* that it has been unable to fulfil.

When a Brazilian merchant has sold coffee in Europe he negotiates with a banker the drafts which he receives on the French or German house which has bought his coffee, and these drafts are accepted by the banker at their value in gold, as he knows that in Havre or Hamburg they will be settled in gold. But a Brazilian importer, having bought silks in France with the intention of re-selling them in Brazil, will have nothing to offer the French merchant but paper money, which the latter will refuse to receive in payment. He must therefore go to a banker, in order to buy gold ; and it is during this operation that exchange comes into play. When a large number of merchants are trying to buy

gold, and are offering paper, the law of supply and demand results in a rise in the price of gold ; that is, it is necessary to give more paper money and to receive less gold ; in other words, exchange is low. If, on the other hand, the bankers have gold in abundance, and compete for the few sellers of paper, exchange rises.¹ Various causes may promote a fall. The most usual cause is the excess of imports over exports ; but a low rate of exchange may also be caused by an excessive issue of paper money. If a Government unduly increases the mass of its paper money, the circulation of paper in the interior increases, and the wealth of each inhabitant in paper increases. But as the Government cannot at the same time increase the sum of the nation's exports, the quantity of gold which the export trade places annually at the disposal of the importers does not increase, and this gold being bid for by competitors who are richer in paper, exchange inevitably falls.

It is in fact the excessive issue of paper that determines the fall of the rate of exchange in Brazil. In 1889, at the time of the Revolution, the total amount of paper money in circulation was 174 millions of milreis, and exchange was above par—at $27\frac{3}{16}$.²

With successive issues a rapid fall set in. From 1890 to 1891 the average exchange was $18\frac{7}{16}$; in 1891

¹ The terms employed in Brazil to denote the price of exchange are based upon the value of the Brazilian paper unit, the milreis, in English money. It is said, for instance, that exchange is at 10 or 15 ; this means that the milreis is worth 10 or 15 pence. Exchange would be at par if it stood at 27 ; that is, if the milreis were worth 2s. 3d.

² The milreis at par being worth 2 fr. 70, the paper currency had a total value of £18,790,000. The republican Governments, first with the avowed intention of stimulating trade, and afterwards as a simple budgetary expedient, added further issues to this original stock. In 1898 the paper currency amounted to 785 millions of milreis.

to 1894 it fell to $12\frac{1}{2}$; in 1895 to 1897 to $9\frac{1}{2}$. In 1898, and during the first quarter of 1899, it reached almost the lowest point of the curve—between 6 and 7; that is, for several months paper was worth less than a quarter of its nominal value. The situation was extremely serious. The Federal budget was of course deficient. Having to pay a large proportion of its liabilities abroad, and consequently in gold, while it received its revenues entirely in paper, the Treasury found its difficulties increase with every fall in the rate of exchange, and the further paper sank below par the more it lost hope of all possible improvement. The deficits could only be filled by new issues, a remedy that aggravated the evil, since it resulted in a still further depreciation of paper.

Under these conditions, at the moment when Brazil appeared to stand on the brink of inevitable bankruptcy, her financial credit was saved by the ability and common sense of her creditors, who offered her the salvation in which they themselves had the greatest interest. The operation which marked the beginning of financial restoration was known as the *Funding Loan*. It was negotiated in London, in 1898, between the Rothschild Bank and the President, Campos Salles, and is the latter's chief title to be remembered. The plan was simple. The Brazilian Government recognising that it was unable to pay the interest on the various foreign loans which it had contracted, would pay this interest from the 1st of January, 1898, until the 30th of June, 1901, not in gold, but in consolidated bonds (Funding bonds), which would be issued periodically. The Rothschild Bank was to issue £10,000,000 in shares bearing 5 per cent. interest, guaranteed by a first mortgage on the Customs receipts of Rio and other ports. This was to deliver Brazil for three years from the burden of

her debt ; but the important point was that in exchange for this favour Brazil undertook to pay Rothschild's, as the bonds were issued, their equivalent in paper money at 18 ; which was immediately destroyed. It was hoped, by this reduction of paper money, to arrest the downward tendency of exchange, then gradually to lead it upward, and finally, once financial conditions had recovered their normal state, to enable Brazil to resume her payments without difficulty.

The plan of the Funding Loan has succeeded perfectly. In March, 1899, the downward course of the rate of exchange was arrested. In August fifty millions of milreis in paper had already been burned, and exchange rose above 8. Since then the rate of exchange has increased year by year. By April, 1908, nearly 145 millions of milreis of paper, or nearly one-fifth of the total circulation, was destroyed ; and exchange stood at 16. The period of depression was evidently passed over.

Yet opinion was less unanimous than one would have expected on the question of exchange. The general public welcomed the increase with delight, regarding it as a sign of financial health and the re-establishment of Brazilian credit. But there still remained a large number of partisans of low exchange. These latter, to tell the truth, were making profits in many markets. We have noted that although paper had lost its value as international money, it had not lost its purchasing powers in the interior of Brazil. A country like Brazil does not live by its importations ; the lower classes consume scarcely any foreign products. Consequently the prices of ordinary articles of food had undergone no alteration in spite of the depreciation of paper, and salaries paid in paper had not been altered. But every producer who sold his products abroad, who received

his payments in gold, and then changed this gold into paper money, received a far larger amount of paper money when exchange was low; and this is why a number of people preferred a low rate of exchange.

An example will suffice as commentary. In 1889 Brazil exported produce to the value of 258 millions of milreis in gold. In 1898 the Brazilian exports, being fewer, were valued only at 216 millions. Yet in 1889, exchange being above par—at $27\frac{3}{16}$ —the exporters received in paper, the money current in the country, only 253 millions; while in 1898, favoured by the fall in exchange, they received 814 millions, or three times as much! This difference represents very clearly the profit derived from depreciation. On the other hand, valorisation was ruinous to them, and resulted in an outcry. With a certain plausibility, having analysed the causes of their discontent, they attempted to show that Brazil was divided into two camps; in one were the consumers of articles imported from abroad, who desired a high rate of exchange; in the other, those who desired a low rate, were the producers, a class more worthy of governmental solicitude. It is true that their line of reasoning must not be carried to an extreme; it is obvious that a continual fall, by disorganising the economic life of the country, would inevitably harm the producers also. But it is also true that the too precipitate increase of exchange between 1899 and 1906 did cause very great suffering, and that the complaints of this party expressed what was true.

Beside these two hostile parties, of which one desired a high and the other a low exchange, there was a third, which desired above all to see the exchange remain movable and variable; this party consisted more especially of business men and bankers, whose easiest

profits came from speculation in exchange in all its forms.

The principle of the variation of exchange is easy to grasp. It happens that the sales of gold on the market of Rio, or the sales of drafts payable in gold, accumulate during an unduly short period, about June or July—before the exportation of coffee commences, and at the moment when settlements are being made. This is the case in all countries which export a leading agricultural product, and its unfailing sequence is an increase in the rate of exchange. During the next few months exportation slackens; the offers of gold are reduced; the banks are dealing now only with importers, who are endeavouring to obtain gold with which to pay for their purchases abroad. They divide among these importers the reserves of gold which they have been accumulating during the months of exportation, and, to their great profit, exchange falls; that is, for the same amount of gold they receive more paper. The periods during which exchange shows a tendency to fall, supposing that speculation leaves free the play of natural economic factors, falls, as a rule, in Brazil, between February and May.¹ The fall in the rate of exchange is all the more difficult to avoid when the commercial year has been unsatisfactory; that is, when the exports have been less than usual and the crops of less than average quality. At the beginning of 1908, accordingly, after a deficient crop of coffee, a fall was greatly dreaded; but it was happily possible to avoid it.

¹ The busy months for the exportation of coffee are September and October; but we must remember that the rate of exchange applies not to exchange at sight, but to exchange at ninety days. The coffee harvest increases the rate three months before it is at its height, and the tendency to a lower rate shows long before it is finished.

A very lucrative and practically certain form of speculation for bankers used to consist in buying gold when exchange was high—that is, when gold, regarded from the paper standard, was cheap, as it was during the months of exportation—and in selling it when exchange was low; that is, when gold was dear, as it was during the rest of the year.

As a matter of fact, when we study the variations of exchange more closely we find that the very simple laws which we have explained have very seldom had absolutely free play. Speculation has almost incessantly intervened; sometimes to check and sometimes to exaggerate the movements which the changes of the market would naturally provoke. Sometimes a certain bank, foreseeing, during a certain period, a tightness of gold, would accumulate reserves of it, thus preventing the expected fall in the rate of exchange; sometimes, on the other hand, speculators would buy all the available gold in the market, so that barely sufficient would be left to serve the purposes of trade; then, gold being rare, paper would fall to the depths.

The normal annual rhythm of exchange, high during the months of exportation, and low during the slack season, was disturbed not only by speculation, but by numberless other causes. Sometimes the coffee exporters, hoping for a higher price, would keep their goods in their warehouses after the harvest, so that the season of export would be so drawn out as to become confounded with the season of the following year; sometimes loans contracted in foreign countries would bring gold into the country at a season when international trade would not have introduced it. The exchange curve is consequently extremely irregular and discouragingly complex. The money exchange was the scene of frantic gambling, where only the great banks,

which, by force of their financial power, were the actual arbiters of the market, could hope to win. Of these, even the most solid were not always safe from all risk, and more than one passed through a troublesome crisis after some period of too adventurous speculation.

To give some idea of the vicissitudes of the economic life of Brazil before the establishment of a fixed rate of exchange, we shall do well to follow the variations of the rate for a single year. I have purposely chosen the year 1900, as one in which the irregularities of the value of paper money were even greater than usual.

The year opens in January with exchange at 7. The value of paper is very low. The Funding Loan has not as yet had time sensibly to improve the position of Brazilian credit. But a rise is visible towards the end of January. The struggle has commenced between the speculators, who have gold in hand, and the banks, which wish to force the holders to sell it. The rise in the rate of exchange is ruinous to the holders of gold, who bought when the rate of exchange was low, since the rise of the exchange rate is in reality one and the same thing with a fall in the price of gold. The banks accordingly endeavour to provoke a rise in the rate of exchange; the battle grows desperate, and the result is for a long time doubtful. Finally the banks gain the day, and by the end of February exchange has risen to $8\frac{1}{4}$; that is, the value of a milreis of paper has risen from 7d. to $8\frac{1}{4}$ in two months.

But the season of the year is badly chosen for a lasting rise. It is, in fact, the time when exportation ceases; the coffee markets are paralysed; the markets of Santos and Rio furnish no drafts on foreign houses; gold is scanty. Thus the rise is impeded for several months; at the end of April exchange still stands at $8\frac{1}{4}$, as it did at the end of February. In May, the London and River Plate Bank

declares itself openly for the rise. The movement is upheld by numbers of speculators. The market begins to anticipate the coffee harvest, which should commence in July; and the abundance of gold which it will produce, and the higher rate of exchange, becomes confirmed two months before the beginning of the crop. The import houses on the Rio market profit by the high rate to settle their debts abroad. At the end of May exchange is at 9, a figure which it had not attained since January, 1897.

Nevertheless, the conviction obtains that the rise is not factitious: that presently exchange will run still higher, and that the importance of the coming crops will raise the price of paper in a lasting manner. Confident of a high exchange, a large number of speculators are selling gold unsecured; the rate is maintained. "In June a radical transformation is effected in the exchange market. Formerly the holders of letters of exchange (that is, those who were carrying gold) were the true arbiters of the rate of exchange; but to-day it is the possessors of paper currency in circulation who settle the value of gold in notes."¹ In the end exchange was over 11 at the end of June. In July it was more than 14. We can imagine the loss sustained by a merchant who had bought, say, in January, a stock of imported goods with exchange at 7, when the same stock bought six months later with exchange at 14 would have cost him half as much.

But the rise has been too sudden to last; especially as all the sellers on credit, who are now seeking to cover themselves, are increasing the normal demand for gold. Again the quantity of gold offered is insufficient for the requirements of the market. The London and River Plate Bank is interested in the rise. The other banks club together to resist it. During the first three months of the year there had been a struggle between the banks

¹ *Jornal do Commercio* (*Retrospecto commercial pour 1900*).

and the speculators ; there is now a conflict between the banks themselves. Those in favour of a lower rate carry the day. At the end of July exchange has fallen again to 11. The fall quickens. In September begins a banking crisis; the Bank of the Republic suspends payment. The Government immediately sets to work to reorganise it to the satisfaction of its creditors ; but other banks are in danger. The market is dull ; speculation is timid. The fall continues. Fortunately the commercial situation is not bad ; the consignments of coffee are large, and the depression is not general. Exchange oscillates, towards the end of the year, between 11 and 9 ; and as a whole the year seems to mark a sensible increase in the rate, which has gained two points between January and December.

Such is the history of this year—a year full of disturbance and catastrophe, which witnessed the first notable increase of exchange since the Funding Loan. If it brought ruin to more than one speculator, many issued from it with profit. With the exception of the London and River Plate Bank, which was badly shaken by the low rate of August, the foreign banks made large profits. The irregularities of exchange have made many fortunes ; we can well understand that a certain class of speculators on the money market dreaded nothing so much as the regular organisation of exchange.

For this very reason it naturally seemed desirable to all Brazilians really anxious for the future of their country. The continual uncertainty of prices, which resulted from the instability of the value of money, had disastrous effects upon the whole economic life of the country. One wonders how any industrial or commercial enterprise could ever establish itself on so unstable a foundation. The banks neglected their regular discount business, and gave themselves up to operations of exchange. The

love of gambling in all its forms became a public characteristic. I do not know whether the universal popularity of the "Jeu de Bêtes" may be dated from this period—a form of gambling now practised all over Brazil, and even in the smallest centres of population, which is a powerful factor of national demoralisation.

The one chief object of the more far-sighted politicians, from the day on which the credit of Brazil appeared to be consolidated, was not to obtain a higher rate of exchange, but a fixed rate. This was the aim of President Penna in creating the Caisse de Conversion in 1906. The Caisse is his personal work. It is probable that he was influenced by the example of the Argentine Caisse de Conversion, which, reorganised in 1899, commenced only in 1903 to render the services which were expected of it. Before his election Senhor Penna announced that his chief anxiety would be to restore to Brazil a sound currency of fixed value; that is to say, to put an end to the gold premium. "The transformation of an unstable paper currency into convertible paper is the first duty of the Republic," he declared in a speech of the 12th of October, 1905. He added that the immediate conversion of the paper currency as a whole and at its actual price would be impossible, nor would it be honest; that it would be necessary to go forward step by step, and that as it was difficult, under the circumstances, to create a bank of issue which should pass into circulation a convertible paper which would gradually take the place of the old State paper, the Government would be obliged to take steps of its own.

The machinery which the Government would employ would be the Caisse de Conversion. Its function would be to issue, against the gold received by it, whether from depositors or the Government, notes of a fixed exchange value; notes which would be perpetually convertible,

upon presentation at the Caisse, since the Caisse would only issue such notes in proportion to its wealth in gold. It would therefore introduce into Brazil side by side with the inconvertible currency a second kind of money which would be convertible; exchange would be fixed, since the inconvertible money could no longer depart from the value of the convertible money, which would be invariable. Thus a steady horse in harness will keep a restless companion in order.

This proposal of a Caisse de Conversion was discussed at some length between the future President and the representatives of the coffee states in the month of January, 1906, when a remedy was being sought for the coffee crisis; and the creation of the Caisse was associated with the first project of the operation known as the *Valorisation of Coffee*. This valorisation, as it was then conceived, would have required a loan of £15,000,000. The product of this loan would serve as ballast to the Caisse. Instead of turning the gold resulting from this loan directly loose upon the country, the Caisse would issue, on the security of this gold, notes which would enter into circulation in proportion as the coffee states should have need of them, the gold remaining accumulated in the Caisse. In short, the coffee-planters were more than any one interested in the establishment of the Caisse; for the abundance of gold resulting from the proposed loan, were it freely to penetrate the country, would inevitably produce a notable rise in the rate of exchange; and we have already shown how the large proprietors were bound to suffer from a rise. There was, therefore, nothing strange in the alliance between the Paulistas, who wished to prevent the rise, and the President, who wished above all to fix the rate of exchange. The Caisse de Conversion would serve to attain this double object.

The attempt at valorisation having miscarried, as we

shall see in another chapter, Senhor Penna returned to the plan of the Caisse de Conversion in a slightly altered form, and the institution was finally opened on the 6th of December, 1906. Its method of operation and the services rendered by it were explained in the report of the Minister of Finance for 1907. The Caisse is entrusted with the issue of paper convertible against the deposits of gold at the rate of 15 milreis = 15 pence in gold. On the 31st of December, 1907, the Caisse had in gold a deposit balance of £5,816,352 sterling and 10,585,680 francs (£423,427), or £6,239,779 in all, and had issued rather more than 100 millions of milreis in notes (their value at 15 being £6,250,000). That is, the convertible circulation was already nearly equivalent to a sixth of the inconvertible circulation.* It is easy to understand how the Caisse fulfils its function, which is to fix the rate of exchange. When exchange rises above 15 all the bearers

* The Brazilian Caisse de Conversion differs from the Argentine Caisse only on one point: the Argentine Caisse issues notes exactly like the ordinary notes, while the notes of the Brazilian Caisse are different from the ordinary notes. It follows that in Brazil any bearer of a convertible note is assured of obtaining gold upon the presentation of his note at the Caisse; but in the Argentine every bearer of a note runs the risk, in times of panic, of being outstripped by other bearers, who may exhaust the funds of the Caisse, so that he will not receive gold for his note. Consequently the Argentine Caisse only begins to receive deposits once the general confidence in the finances of the State is perfectly established; when a fall in the rate of exchange is improbable and when every individual, finding that exchange tends to rise, is anxious to buy paper at the fixed rate at which the Caisse de Conversion issues it. In Brazil, on the contrary, the depositors risk nothing, since their gold cannot be paid out to the bearers of inconvertible notes. According to the Brazilian system the purchase of paper from the Caisse actually constitutes a deposit, and its notes are certificates of the deposit of gold. The danger of the Brazilian system is that the two currencies created, the convertible and the inconvertible, do not mix; the inconvertible paper only remains in circulation, while the convertible paper, like actual coin, will remain shut up in the banks.

of gold flock to the Caisse to exchange their gold for paper, at a more advantageous rate than that offered by the banks. The Caisse thus absorbs the gold, and its issues increase the general circulation of notes. Gold becoming scarce and paper plentiful, the Caisse thus checks the rise in a twofold manner. Thus exchange cannot rise very sensibly above 15. If, on the other hand, exchange falls, gold will be worth more in the market than the paper with which one can buy it at the Caisse; so the bearers of convertible paper present themselves at the counters of the Caisse, demanding gold. Gold re-enters into circulation, and the fall is checked. Thus the Caisse de Conversion can resist the depression as long as it has gold in its coffers, and can continue to pour gold into the market.

We see that the action of the Caisse is not exactly the same in the event of a rise as in the event of a fall. It is an all-powerful defence against a rise, because its deposits may increase without limit; but against a fall it can only struggle for a time; any very prolonged fall would empty its coffers and overcome its resistance. The Caisse is thus more especially a defence against a rise; but practically, failing some irresistible national crisis, it is able to perform its double duty, and equally well to prevent a rise or a fall. The Caisse has already fulfilled its function as a safeguard against low exchange; notably during the first three months of 1908. This was the first occasion on which it was called upon to give proof of its capacity in this direction. After the scanty coffee crop of 1907 gold was rare and a fall was feared, as the rate had fallen before under similar conditions; and the Caisse saw its deposits diminish, but was not emptied, and the rate of exchange was maintained.¹

¹ It is so much to the interest of the Brazilian Government to avoid a fall that it has intervened on the money market itself. For

The Minister of Finance is doing his utmost to prove that the objections made against the Caisse de Conversion at the moment of its installation are without justice. It was foretold that its funds would be used for other purposes than the redemption of notes ; which would thus, by force of events, be inconvertible. The Caisse de Conversion would in time become merely a bank of issue in disguise. This is a kind of criticism to which an honest Government might well refuse to reply.

Another objection was, perhaps, more serious, as it was at least an objection on principle. The Caisse was reproached for fixing the rate of exchange at 15, and so impeding Brazil in the movement which was rapidly leading her towards exchange at par ; that is, towards the free circulation of gold. Was not the creation of the Caisse a kind of bankruptcy ? And by what right does a Government issue paper which has a value less than par ? The Minister's reply is simple. To begin with, he hints that when the deposits of gold in the Caisse are sufficiently large to allow of such a step, a modification of the rate of exchange will probably be effected. Then, the state of the market permitting, inconvertible paper at 15 might be replaced by convertible paper at 16. Brazil thus affirms that she does not abandon the hope of finally securing a gold currency.

Secondly, the actual services rendered by the Caisse are such that there was a justification for making some sacrifice. Brazil would have paid too dearly for hopes too remote had she insisted, out of respect for the

example, it struggled against the fall by contracting in Europe a loan for a short term, upon which it can draw when the Rio market requires gold. It takes care that there is always a sufficient offer of gold in Rio. An official intervention of this kind, hardly orthodox, but after all extremely useful, was effected in the spring of 1908.

principle of exchange at par, upon continuing to live for an unlimited term of years under the system of variable exchanges, so deplorable were the consequences of what used to be called "the dance of the exchange."

Indeed, the creation of the Caisse seems to have opened to Brazil a new economic era. Since the beginning of 1907 exchange has almost invariably stood in the neighbourhood of 15 $\frac{1}{4}$. Brazil has at last acquired a stable currency, the indispensable basis of progress for any nation which intends to live not by speculation, but by regular work ; by agriculture, industry, and commerce. Monetary stability, which will bear all its fruit in a few years, when time has proved that it is durable, and when new habits have been created, will be for Brazil one of the most potent elements of national reconstruction.

CHAPTER VII

SAN PAOLO

Historical formation of Paulista society—Fertility of the soil of San Paolo—Colonisation in San Paolo, and the extension of the coffee plantations—The population of the State—The economic activity of San Paolo and its power of absorbing foreigners—The schools.

THE history of modern Brazil may be sketched in a few lines. Nothing in this history is more important than the growth of San Paolo to its present position. It is the true economic centre of the country. While tropical Brazil, Pernambuco, and Bahia remained in the first rank during the colonial era, their influence has been declining since the Declaration of Independence, to the profit of the southern part, the temperate zone of Brazil. San Paolo leads the way at the head of this younger Brazil.

But, even in San Paolo, not all the progress of recent years, nor its rapid growth, its new sources of wealth, nor the place it has so quickly conquered in the economic life of the world, nor the influx of its immigrants, has effaced the heavy imprint of the past. A holiday spent in San Paolo leaves one with an impression of something very much more than a recently formed civilisation. The population sprung from the old Paulista blood has left its mark on the modern development of the State. It has been the engineer ; it has reaped the profits ; and it has



SAN PAOLO : GOVERNMENT PALACE.



no thought of relinquishing them. It still forms the most firmly constructed and most exclusive social organism in Brazil. The Paulista traditions hark back to the seventeenth and eighteenth centuries. Bands of prospectors for precious metals, starting from San Paolo, explored the whole of the interior of the continent; they were known as *bandeirantes*. These expeditions, semi-military by nature, Odysseys of adventure, which struggled against distance, climate, and privation, were a severe school of character, in which a people was formed.

When d'Orbigny visited San Paolo in the middle of the nineteenth century, when, according to his testimony, cattle were the chief wealth of the province, the density of the population on Paulista territory was still extremely low, and the capital was only a big village. However, d'Orbigny observed that there was a kind of local patriotism; that the Paulistas had inherited from their ancestors, the *bandeirantes*, an energetic character full of audacity and enterprise.¹ "As a result of this adventurous life, the Paulistas remained in the world of Brazil as a marked exception; and San Paolo very quickly came to form a little republic, not at all unlike one of the Italian republics of the Middle Ages, and as turbulent as they. . . . The Paulistas are proud of such antecedents." Many things have altered since the period of d'Orbigny's travels; the village has become a city with 300,000 inhabitants. The forest has on all hands receded before the growth of crops; coffee has resulted in a flood of wealth a hundred times greater than that which the raising of cattle had produced in earlier times; and yet in the very expansion of San Paolo there is something that corresponds with the idea expressed by d'Orbigny. The Paulista republic has kept alive its ancient spirit.

¹ D'Orbigny, "Voyage ans les deux Amériques," p. 178.

Although contemporary manners have denied adventurous characters such opportunities as were theirs of old, and although the long wanderings in the interior are a thing of the past, yet the true Paulista energy was awakened by the sudden spread of coffee-planting, and therein found its vent. The conquest of the soil by the planters had all the rapidity of a raid.

The territory of San Paolo is the only portion of Brazil of which we have to-day a scientific knowledge. Nowhere, save perhaps in Paraná, is the character of the plateau more pronounced ; and nowhere does the Serra do Mar slope more steeply to the sea. At the foot of the *serra* the belt of low-lying lands, hot and humid, spread out to form the basin of the river Iguape. Altitude being a corrective of latitude, it happens that the tropical portion of the State is that furthest removed from the Equator. In the opposite direction, to the north of the *serra*, stretches the heart of the Paulista country. The height of the plateau above sea-level averages about 2,500 feet near the ridge of the *serra*, but it slopes slowly downward toward the north-west, until near the Paraná its elevation is only some 900 to 1,200 feet. The prevailing climate of the table-land is uniform ; everywhere are the same summers, watered by heavy rain-storms ; the same winters, bright and dry, when sometimes, after the coldest nights, the mornings reveal a film of ice upon shallow waters. No range of hills rises from the plateau, cutting it into isolated cantons, like the Mantiqueira range in Minas. The country is scored across by a series of wide valleys ; between them the plateau stretches in long masses of irregular shape, which are not really ranges, but a kind of dorsal system, which rises only a few hundred feet above the level of the plateau. The rivers rise to the east, in the foothills of the Mantiqueira, which invades the territory of

San Paolo from Minas, and there dwindles away ; the general flow of the rivers is from the south-east to the north-west.

The rocks which constitute the various parts of the plateau give to each its characteristic aspect. To the east gneiss and granite prevail, forming rounded hillocks, irregularly disposed ; the superficial weathering of these rocks by the rains produces a red soil, tenacious and heavy, which gives the rivers a muddy tinge. The city of San Paolo is in the centre of this belt of granite. To the west stretches the sandstone country. The bordering line of the sandstone and the gneiss and granite forms a huge curve, with its convexity turned towards the east, parallel with the coast from the Paraná border as far as the cities of Sorocaba and Campinas, whence it runs almost exactly north, past Casa Branca and Franca. To the west of this line the sandstones prevail unbroken ; grey sandstone and red, the former friable, giving a vague, weathered topography ; the latter, having better resisted the rains, is a salient feature of the plateau. Both give a light and permeable soil, which does not retain water. But it is not on the granitic clays nor on the sands or gravels that the fortune of San Paolo is founded. The greater part of the agricultural property of the State is concentrated upon soils of a kind that cover relatively only a small part of its area : the diabasic soils. Eruptions, probably tertiary, have spread over the surface of the plateau lavas which are rich in phosphorus ; wherever they exist the natural vegetation is richer, and colonisation has found a more favourable foothold. Decomposed, these lavas form a deep soil, dark in tone, which the Paulists call "red earth," though it might more appropriately be called purple, to distinguish it from the other red earth which is formed by the decay of gneiss and granite ; and it is really of a magnificent

purple colour. These diabasic rocks are most often found in the midst of the sandstones, in the form of small rounded hillocks, which are higher than the surrounding level. It is thus that one finds them near Campinas or Ribeiraon Preto ; elsewhere they are found in sheets, or they run in veins across the sandy soils, which are baked like bricks along the lines of contact. A very hard rock, wherever the strata of greenstone cut across the bed of a river it forms falls or rapids. Wherever a Paulista river is barred by falls one may be almost certain of finding greenstone.

The river system of the State has done little for colonisation ; the Tieté, the most important river of the plateau, which it crosses in its widest part, has numerous obstacles to navigation. The first is the fall of Ytu, situated where the river crosses the last breastwork of granite. The Tieté thereafter flows more soberly ; but there are still several rapids below its confluence with the Jacaré ; then follows a navigable stretch of great length, in which the current is hardly perceptible, and which bears the picturesque name of the Rio Morto—the Dead River ; but it is also called the Rio Manso, meaning the tamed river. The length of the navigable reach is about fifty miles. It ends to the west in the falls of Avanhandava, where the river crosses a deep bed of greenstone. From this the river descends in cascade after cascade, and crosses the great falls of Itapura before flowing into the Paraná. The Paraná is a great sheet of water, which here and there attains a width of several miles. It flows between sandy banks, round many large islets, shut in by the curtains of the forest.

It would be a navigable waterway of the first order, but for the falls of Urubupunga above the confluence of the Tieté, and those of Salto Grande, on the frontier of Paraguay, which cut off all communication with the

lower portion of the river ; it is also far beyond the limits of the nearest settled land, which nowhere approaches it nearer than 190 miles.

When we inquire into the influence which these physical conditions have had on the history of San Paolo, we are struck at the outset to see how far the disposition of the soil has determined, as by the laws of geography, the situation of the capital. The site of San Paolo was, in a sense, already marked out.

The city is far from being in the centre of the State. Piracicaba and Campinas both hold more central positions. But Campinas has been forced to renounce the hopes which she conceived fifty years ago of becoming the rival of San Paolo. San Paolo is built near the southern limit of the plateaux, at only a short distance from the sea, and only a few leagues from the Serra do Mar, facing a slight depression in the crest of the range ; to the west, beyond the port of Santos, the Serra do Mar draws back from the sea, and the coastal belt, wooded, marshy, and unhealthy, spreads out into the low valley of the river Iguape. Access to the plateau from the coast is at that point more difficult, since the ascent of the *serra* is preceded by a troublesome journey across the marshes and through the forest. At Santos, on the other hand, which faces San Paolo, the *serra* and the plateau run right down to the coast. San Paolo is thus on the only road from the plateau to the sea.

Another road also runs past this point : that which connects the city of Rio and the south of the State of Minas with the plateaux of San Paolo and Matto Grosso. This road runs round to the south of the mountains of the Mantiqueira. The impregnable central mass of the Mantiqueira is surrounded on all sides by roads which have nowhere succeeded in penetrating it. To the east

is the old road from Rio to Ouro Preto ; to the west the road from San Paolo to Uberaba, in the mining district ; to the south, the road from Rio to San Paolo. In France, similarly, the old historic highways follow the borders of the central ranges ; they also mark out the sites of the towns to which they give life. The road running from Rio toward Matto Grosso takes advantage of the valley of the Parahyba to climb out upon the San Paolo table-land ; it then crosses, at no great altitude, the range which separates the Parahyba from the Tieté, an affluent of the Paraná. San Paolo is situated near the point at which this road comes out upon the Tieté, at the cross-roads of the natural highways that run from south to north and from east to west.

The plateau has been the cradle of colonisation. To the south of the plateau is the little tropical river-basin of the Iguape, which must be considered separately. There the physical conditions are entirely different from those of the plateau ; the colonists, Portuguese or half-castes, arriving from the coast, pushed gradually up the valley. There they founded a few "parishes," and grew a little sugar-cane and rice. So far from increasing during the last half-century, their numbers have grown less ; the bar of the river has become choked with sand, and exportation is impossible. The inhabitants live by hunting and fishing more than by agriculture ; the streams and lagoons are full of fish and molluscs, and for a long time have furnished the inhabitants of the river-side with food, for one comes across immense heaps of shells accumulated by the primitive occupants of the soil. These relics of a prehistoric age, which perhaps continued to a period not more than three centuries ago, have lately been the subject of investigation.

Higher up the valley, and especially in the neighbourhood of the point where the river Iguape receives the



IRRIGATION OF RICE FIELDS, SAN PAOLO.

Assungay, we find a different population ; they are not of Portuguese origin, but are the descendants of European colonists who settled, towards 1860, on the upper Assungay, in the State of Paraná. They constitute an example of a phenomenon unusual in Brazil : of colonisation descending from the table-land towards the sea. The inverse has been the rule, and populations which have settled at the foot of the *serra* have often crossed it in order finally to settle on the plateaux. The sons of the Assungay settlers now established on the Iguape are true agriculturists, but they have no outlets for their crops. The only market they could hope to reach is that of Curitiba, the capital of Paraná, of which the colony of the Assungay is a feeder. It is towards the State of Paraná that they look ; their economic existence, as well as their origin, estranges them from San Paolo ; the colonisation of the upper valley of the Iguape is only an episode in the colonisation of Paraná, which by accident has found place upon Paulista territory.

On the table-land the oldest agricultural regions, whose settlement dates from the eighteenth century, are situated in the south-eastern portion of the State. They include the upper valley of the Parahyba and the country about Campinas. They are sprinkled with little towns, already ancient ; they form the cradle of Paulista agriculture, and many a family, transplanted now to the north or the west, had its origins in this country. As in the old agricultural regions of Minas, the crops were of maize and sugar-cane, to which coffee was added long after, but only on a small scale. The products of sugar-planting, and the spirit in particular, were not exported, but consumed upon the spot ; in those days hardly anything save cattle was exported from San Paolo.

About the year 1875 the population seems to have experienced a sudden need of expansion. Energetic

men, resigned to solitude, settled in regions as yet untouched, in contact with the Indians. They lived more especially by raising cattle, an industry possible on second-rate soils, and spread far into the west, until they came to the sandy *sertaon*, which later on was deserted at the time of the coffee boom. This scattered colonisation, without method or capital, gave birth to a population which was half barbarous and extremely independent. To-day, since the expansion of coffee-planting has suffered a check, there is a tendency to resume the conquest of these scanty pastures. Also there still survive there a few representatives of the generation of pioneers who were not followed by the main army of the colonists. Many of these pioneers were immigrants from Minas, who were already accustomed to the isolated existence which they led in San Paolo; Europeans could not have endured it. In the eighteenth century the mineral wealth of the State of Minas had attracted the Paulistas; at the end of the nineteenth century the stream turned, and immigrants from Minas began to settle in San Paolo.

The year 1885 marks the onset of the great coffee-planting fever. For thirty years already the growth of the San Paolo coffee plantations had made steady progress; but nothing could have led one to foresee the extraordinary expansion of coffee-planting which continued for nearly fifteen years. During these years the planting of coffee occupied every mind. It absorbed every one: farmers, large and small, colonists, rich and poor, city men and country folk—all were involved. As always happens under similar conditions, a universal movement of speculation in land both increased and sustained the colonising movement. The growing of coffee seemed to all men the most natural and fruitful object of human intelligence and energy. Other crops

dwindled—cane, cotton, and cereals—and a concentrated and methodical type of colonisation led to the search for soils adapted to the growth of coffee. The “red earth” being *par excellence* the soil for coffee, this search really consisted of a hunt for veins of diabasic soil.

It was at this period that the State of San Paolo covered itself with railroads. Many growers abandoned their old holdings in the long-settled agricultural districts in order to establish themselves further afield. Many different currents of local migration set in; one of them still continues to flow; it is the movement which is emptying the valley of the Parahyba, to the gain of the more northerly districts. The centre of gravity of the State became displaced. The new city of Ribeiraon Preto became the rival of Campinas. Colonisation fixed upon certain favoured cantons, which it rapidly besieged and soon entirely occupied. The invaders never travelled by the valleys. The valleys have been of no economic service in San Paolo. Coffee prefers a height of 1,800 to 2,500 feet above sea-level, where it has less reason to fear frost. The valleys are almost everywhere at a lower level. The plantations are thus grouped in the upland districts, while the valleys remain uncultivated. The three great coffee-producing belts are: firstly, a belt running from south to north, on the foothills and spurs of the Mantiqueira, from Braganza nearly to San João da Boa Vista; secondly, the intermediate heights between the Tieté and the Mogy Guassu, around San Carlos do Pinhal, and those separating the Mogy Guassu from the Rio Pardo, whose fertility made the fortune of Ribeiraon Preto.

Fazendas sprung up in all directions. One can seldom forget, while visiting a coffee-planter's *fazenda*, that the settlement is quite recent; that the owner has become lord of his lands in less than a generation. Even where

the forest has been thrust far back by extensive clearings, it has left its traces; sometimes a few great isolated trees, which have escaped the fire and the hatchet, standing erect amidst the coffee-shrubs; sometimes great trunks, which have not as yet had time to rot, lying between the rows of shrubs.

While the interior was becoming covered with plantations, small centres of population sprang into existence; a whole generation of little towns, all now affected by the crisis. They are not, nor ever were, markets for coffee. The only coffee markets are at San Paolo and Santos, and the merchants of San Paolo and the buyers of the Santos market are in direct communication with the *fazendeiros*. The inland towns do not even serve the purpose of concentrating or storing the crops, but they do ensure the distribution of imported goods throughout the agricultural cantons, for imports have grown at the same rate as exports, and in becoming a great producing State San Paolo also became a great consuming State. Each town contains stores which sell ironmongery, dress-stuffs, groceries, &c., and which supply the store-houses on the *fazendas*. These little towns also drive a trade in money. The *fazendeiros* obtain credit at the small local banks, which are supported by the more important banks established in San Paolo.

Among the elements which compose the populations of these small towns the most unexpected is the number of Arabs, Syrians, and Orientals of all races who will be found to have settled there. It seems they are good men of business; many of them, who began their career as porters or errand boys, are now proprietors of large shops or business houses. It is a most curious sensation to hear oaths and sarcasms, grown familiar perhaps in the streets of Tunis or Algiers, in this new country, from which one would have thought that

the children of Islam and of Israel were for ever excluded.

When I was in San Paolo there was talk of establishing a colony of Japanese in San Paolo. If that is ever accomplished I do not suppose there will exist in all the world an agricultural country in which so many different races will elbow one another.

The capital, San Paolo, grew with the coffee-trade ; its progress was determined by the prosperity of the countryside.* It is above all a great business centre. Coffee pours into it, after the harvest, before going on to Santos ; it is the central market of an active territory, in which money rapidly circulates. San Paolo is not only a produce market, but also an immense market of men and labour. It is, on a very large scale, what the populous towns of Sicily or Apulia are on a small scale, where the labourers meet in the market-place at the beginning of each week, and are hired by the land-owners during the course of the day. It is San Paolo that distributes between the various coffee-producing districts the flood of immigrants who land at Santos. It is there that the contracts between planters and labourers are discussed ; it is there, too, that the labourers return who have left the *fazendas* where they were employed, and are again in search of new masters.

Among these, not all return to the plantations ; many settle in the city. They bring to its nascent industries the offer of cheap labour. Thanks to their presence, San Paolo has in a few years become a large industrial centre, whose prosperity has resisted the coffee crisis.

Stretching out irregularly over the plateau, San Paolo bears in her disorderly structure the traces of hasty

* Its population in 1883 was 35,000 ; in 1907, 340,000. The population of the State of San Paolo was, in 1872, 837,000 ; in 1890, 1,384,000 ; and in 1900, 2,280,000.

growth ; but all the animation and movement of a great city is evident. The business quarters are full of noise and commotion ; the closing of office and factory fills the streets with pedestrians. San Paolo and Rio are the only two places in Brazil where a crowd may be seen. On Sunday the same crowd, but now idle, meets in the public garden known as Atlantic Park.

The society of San Paolo is less interested in literature, style, and eloquence than the society of Rio ; San Paolo is not the capital of Brazilian letters, but one is sensible of a greater activity than in Rio. It is passionately interested in questions of economics. It was, at the time of my visit, excited and disturbed by the efforts of the Government to raise the market price of coffee. It was greedily reading and bitterly discussing pamphlets, constructing projects, conceiving hopes. Its passions appeared all the more ardent in that one felt, behind the opinion of the citizens, the ideas of the rural class of coffee-planters. Nowhere else in Brazil is the cohesion between town and country so complete ; nowhere else are they so closely united by common interests.

San Paolo is at the head of Brazil in the value of its schools, and the pains expended in the organisation of public instruction. The Faculty of Law of San Paolo has exerted a very great influence throughout the whole of Brazil, by means of the generations of jurists and of statesmen which it has trained. The Polytechnic College, though younger, has an equal reputation. I was struck also with the range of the scientific courses which are carried on at the Museum of San Paolo.

But secondary, and, above all, primary instruction, are the departments of education that bear most directly on the future of the Paulista nation. The State does little for secondary education. The State of San Paolo



SAN PAOLO : THE POLYTECHNIC COLLEGE.



SAN PAOLO : THE NORMAL COLLEGE.



contains three public secondary schools : one in the capital, one at Campinas, and one at Ribeiraon Preto ; but the pupils are few in number. Only 145 scholars attend the public school of San Paolo, although the population of the city is over 300,000. The fact is that the State by no means has the monopoly of secondary education. There is a host of private schools, many of which are kept by religious orders. The private schools are for the most part boarding-schools, while there are no boarders at the public schools. This is enough to fill the private schools, since San Paolo contains a class of large landed proprietors, whose children receive a secondary education, and must accordingly be boarded. Many of the private schools are situated in the country, as they draw only a small proportion of their pupils from the cities. The education given in such schools is very unequal, and usually second-rate, in despite of a system of examinations over which the State professes to exercise supervision. Not only in San Paolo, but throughout Brazil, the question of secondary education is to-day one of extreme gravity. It is a problem that must be solved, if the nation would not neglect the important social problem of the formation of a middle class.

It is to primary education that the State of San Paolo devotes all its resources. The budget appropriation is liberal, amounting to £400,000, and some of the schools have the appearance of palaces.

I hardly know if we may also admire the ingenuity with which the curriculum has been drawn up, or the care given to the formation of the teaching staff, or, again, the efforts made by the higher administration to awaken among the young schoolmasters, who are often sent too early to isolated centres, the love of teaching and the sense of the grandeur of their social duty.

Education is in theory compulsory ; but this theory has no sanction in practice. The law of 1893 established penalties for parents who did not send their children to school, and established scholastic commissions to seek out negligent families ; but the provisions of the law are not applied. There are two questions which are intimately connected : the question of obligation and the question of educational monopoly. As long as private education exists side by side with public education it is extremely difficult to make sure that every child shall really be in receipt of primary instruction ; and there can be no question of suppressing private instruction, as the expense of such a course would overburden the State.

The Brazilian States as a whole take up a position of extreme liberalism with regard to private education. They cannot hope to bear unaided the cost of the education of the whole population. Therefore they not only permit private instruction, but often favour it and indirectly seek to develop it. In San Paolo the General Inspector devotes some pages of his latest report to the question of private schools. He speaks of the formidable competition of the public schools with which the private schools have to contend. The public schools are free ; the majority of the private schools are not free. Whenever a new public school is opened the private schools of the neighbourhood have to undergo a fresh crisis. The inconvenience of such a condition of things is obvious. The number of children demanding the entry of their names on the rosters of the public schools is too great ; a certain proportion have to be eliminated by the drawing of lots. It then happens that gratuitous instruction is given to children whose parents could pay ; an obviously mistaken policy. Moreover, is it not a mistake to stifle individual initiative ? "There is always

a demand in Brazil," writes the General Inspector, "for the guardianship or protection of the State ; but such guardianship is always harmful, whether it relates to education or to any other matter." This is a statement which will create surprise among a people especially in favour of State regulation. The General Inspector goes on to deal with the crisis affecting private education, and casts about for the means to save it, instead of stopping to congratulate himself on the brilliant victory of the system of public education.

The States are no less liberal with regard to the foreign schools. These are numerous in Brazil ; especially the Italian schools of San Paolo, the majority of which are supported by Italian societies, such as the "Dante Alighieri" ; and they endeavour particularly to foster the loyalty of the Italian immigrants to their own nationality. Yet they are tolerated ; not only that, but are subjected only to the most liberal supervision.

Here we must mention one of the principal functions of the schools in Brazil : their mission in forming the Brazilian nationality. It is not here, as elsewhere, merely a question of developing the patriotic feeling latent in the minds of all children ; it is a matter of winning over the children of foreign immigrants to their new country. Is not the school the greatest engine of assimilation ? I will here quote a remark from the prospectus of the municipal schools of Rio, which refers to the lessons in civic instruction : "The number of foreign pupils in the schools of the district is considerable. The professor, consequently, in defining the idea of the mother country, must not insist on the idea of *the country which has given one birth*, for that would be contrary to the propaganda which we must undertake in favour of our own country. In such teaching the foreigner would find reasons for loving not Brazil, but

the country from which he came. Instead of constantly speaking of the abstract idea of the native land, the *patrie*, let the teacher speak of Brazil. Let him affirm dogmatically, as though he were announcing a religious truth, that Brazil is of all the countries of the world the most beautiful, the noblest, the most worthy of being loved."

In San Paolo, where the number of foreigners is even higher than in Rio, I find nothing of this sort in the scholastic regulations ; nothing to denote the same pre-occupation, the same passion for converting the children of foreigners to the national religion. The teacher will have no occasion to strive to cultivate in his pupils, the children of Italian immigrants, a jealous Brazilian patriotism ; for the parents themselves feel no hostility towards the Brazilian schools. San Paolo has other means of assimilating immigrants ; why have recourse to the schools ? The business activity, the intense life of the place, the sight of and contact with a people full of energy and ambition, are enough to absorb the adults themselves into the Paulist nation. The Italian problem has never troubled San Paolo as the German problem has troubled Rio Grande. Business prosperity has given San Paolo a power of absorption greater than that of all the other Brazilian provinces. We must hope that this prosperity, compromised to-day by the crisis, will soon be re-established, and that the process of assimilation, which so far has barely slackened its pace, will soon resume its full intensity.



SAN PAULO : AVENIDA PAULISTA.

CHAPTER VIII

AGRICULTURAL LABOUR IN SAN PAOLO

The abolition of slavery and the advent of free labour—The colonists—The system of free immigration—The arrival of immigrants in San Paolo—The *hospedaria*—The *fazenda*—Labour on the coffee plantations—The Italian question—The coffee crisis and the plantation labourers—The uncertainty of rural labour in San Paolo.

THE culture of coffee in San Paolo is bound up with the existence of large estates. Large estates require a class of agricultural labourers. For the last twenty-five years the solution of the labour question has been the chief preoccupation of the statesmen of San Paolo. The most usual form which the official protection of the coffee industry has assumed in San Paolo has been the provision of labourers for the *fazendeiros*; and the point in which the Paulista *fazenda* differs from that of Minas is that the labourers are European. It is by encouraging immigration that the Paulista Government has assisted the coffee-planters.

Immigration for the benefit of the planters has introduced a new population. To-day men of all races live side by side on the soil of San Paolo. We shall have occasion to inquire how far they intermingle; whether the workers of foreign origin have remained as strangers, or whether they have received the rights of citizenship; in short, what place they have taken in the national life.

The question of labour introduces a still more serious question : that of the formation of a people.

In no country have the conditions of agricultural labour been so profoundly and so rapidly altered as in Brazil. The origin of these changes was the abolition of slavery twenty years ago. But while the enfranchisement of slaves has been an economic catastrophe in the case of most countries dependent on negro labour, and while, in other parts of Brazil, it resulted in a general agricultural depression, it was in the case of San Paolo the signal for an extraordinary agricultural renaissance. The abolition of slavery was pronounced in 1888, and it was between 1888 and 1890 that the great expansion of coffee-planting took place.

How was the era of free labour heralded in San Paolo? It had been coming ever since the middle of the nineteenth century, forty years before the abolition of slavery. Abolition was foreseen long before it was decreed ; it was expected, and remedial measures were sought in advance. During the whole century the question of slavery was incessantly discussed ; it was at once a social and a diplomatic question ; it was the cause of perpetual difficulties with England, who was endeavouring to stop the slave-trade. Although Brazil was angered by English interference, abolition counted many supporters among the Brazilians themselves. From 1870 onwards slavery was opposed not only by the philanthropists but also by the economists. The idea was conceived that the slave is an expensive workman, and that slave labour is a check upon production.

As the end of slavery seemed to approach, its economic value decreased. The price of the slave continually rose as the number of slaves decreased. A large price had to be paid for a form of merchandise which ran the risk of taking wings, from one day to another, so soon as

abolition should be proclaimed. This uncertainty as to the future contributed to wean the planters from the institution of slavery. In San Paolo they did not oppose abolition ; on the contrary, the *fazendeiros* themselves took part in the last few years of the abolitionist propaganda. They headed the societies in favour of free labour ; they retained no illusions as to the future of slavery, and a year before the abolition of slavery by law large numbers of them voluntarily freed their negroes. The situation of such owners as had retained their slaves was becoming difficult ; and discipline on the *fazendas* was becoming impossible. The abolition law merely ratified the already profound disorganisation of slave labour.

The planters who had freed their slaves before the legal abolition of slavery had hoped to attach the slaves to their owners by force of gratitude, and to retain them after abolition as free labourers ; but they profited nothing by their generosity. The negroes forsook agriculture and crowded into the cities ; the number of coloured agricultural labourers has since then grown more and more insignificant. To-day only a few bands of woodmen are recruited among the blacks, by planters who require fresh tracts of forests cleared ; they hire themselves by the month to planters who are clearing the forest, and here and there one finds their wretched encampments on the borders of the burnt-out clearings. Although there are no statistics, it seems certain that the negro population is to-day rapidly decreasing, at any rate in the State of San Paolo. The abolition of slavery has led to the rapid elimination of the black labourer.

Foreseeing the abolition, the Paulistas had for a long time had recourse to free labour. The competition of slave labour could not prevent the spread of free labour. As the year of abolition approached free labour tended

to prevail. The first free labourers were not recruited on the spot, but were imported from Europe.

In 1847, Senator Vergneiro engaged in Germany eighty families, whom he established on his coffee plantation near the town of Limeira ; these were the first "colonists." When Senator Vergneiro made the experiment of working his estate by German labour the Brazilian Government had already been organising colonies for thirty years in other parts of Brazil, its practice being to grant concessions of land to the immigrants. No one remarked the difference between the Imperial policy of the Government, which opened fresh territory to agriculture by dividing it as property between the European colonists, and that of the rich planter, who imported his staff from Germany. These two very different forms of European immigration were both denoted by the same term : "colonisation." In San Paulo to colonise was to employ immigrant labourers on the plantations ; every labourer of foreign origin was called a colonist, in contradistinction to the slave or native labourer. Thus the word "colonist" has a special meaning in San Paulo ; the colonist is not an owner of land, but an agricultural labourer.

After five years the experiment of Senator Vergneiro was judged to be conclusive ; from 1852 it found many imitators. In 1857 over forty colonies had been established ; in 1875 there were nearly ninety. These twenty-five years comprise what is known in San Paulo as the period of *private colonisation*.

The "colonists" engaged by Senator Vergneiro had signed, on leaving Germany, a contract of *métayage*. (A *métayer* pays his rent in labour or in kind, or his labour is paid in kind and in board ; both aspects of the matter really amount to the same thing.) The proprietor supplied them with coffee shrubs of productive age ;

their only duty was to look after them. The crop was divided in half, and one half was reserved for the colonists. In reality there was one factor which complicated their situation. Their employer had paid their expenses to South America; to this debt others were added, for they had to live until the first harvest, and thus had to ask for further advances. The families were large, and the expenses of the voyage heavy, so that each colonist began with considerable liabilities. Now, the contract stipulated that the colonists could not break their engagements and leave the *fazenda* until they were free from debt; thus their independence during their first few years in Brazil was sacrificed.

They were not always satisfied with their lot. Disturbances occurred in some of the colonies, and the news reached Europe. In 1867, after an inquiry held on the spot, the traveller Hermann Haupt presented to the International Emigration Society of Berlin a violently worded report, containing every possible indictment against the system imposed upon the colonists living on the *fazendas*. Haupt insisted that the situation of the free labourer in the "colonies" of San Paolo did not differ from that of a slave, and that the Brazilian laws were not those of a free country. The laws which guaranteed the discipline of agricultural labour among the hands employed on a *fazenda* placed inadmissible means of repression in the hands of the planter; nevertheless, what would have been the use of more indulgent laws in a country where every estate was a little kingdom in itself, whose independence was guaranteed by the enormous distances of the country, and the weakness of the executive power in a nation which was governed not by laws, but by customs?

The contract of *métayage*, said Haupt, reduced the immigrants to a condition which was almost equivalent

to slavery. The money advanced by the planter to the colonist, which the colonist was incapable of repaying, was equivalent to the purchase-price of a slave. Instead of buying a slave, the planter went to the expense of bringing a colonist from Europe; the sum expended was practically about the same, and the colonist, thus heavily indebted, would have scarcely more independence than the slave. Sometimes the whole family was responsible for the debts contracted by the father; in such cases the son remained tied to the *fazenda* as long as his father still owed money. The son, said Haupt, is mortgaged in advance. Not merely an individual, but a whole family is devoted to servitude from one generation to another. If a planter does not care to go to the expense of importing the labourers he needs from Europe, he will find colonists in the neighbouring plantations who are enslaved by their debt; these he may liberate, in order to take them into his own service, by re-paying their master what is owing; the colonists, having changed their creditors, will also change their masters. Some years earlier it even used to happen that immigration agents would place on the market—market is precisely the word—immigrants who owed them the cost of their passage; giving them up to whosoever should buy up the colonists' liabilities. This kind of transaction, it seems, had disappeared after 1857; but for a long time after that date the agents who brought immigrant labour from Europe must have obtained from them more or less irregular contracts by which the unhappy creatures alienated some portion of their liberty. In exchange for moderate advances they used to promise ten years of service, and sometimes even more.

I remember a family of Italians whom I met at the village of Morro Cipo, on the territory of Ribeirão Preto, where they were growing coffee. They had come out to

San Paolo shortly before the abolition of slavery ; and they had not lost the memory of the tribulations which they had suffered on their arrival. First, by a trick, they had been made to sign a contract, the precise terms of which it was not easy to gather from their explanations, which were lacking in legal precision ; but they gave the general sense of it in their statement that they had sold themselves as slaves. Thanks, they told me, to the protection of the Brazilian Government, they succeeded in regaining their liberty.

It is difficult to judge whether the indignation of Hermann Haupt was legitimate ; for at the period of which he wrote a large number of ex-colonists had acquired small properties ; a fact which proves at least that some portion of the plantation labourers had succeeded not only in liberating themselves, but also in saving money. If there was an abuse of authority on the part of some of the planters, was it to be expected that they should immediately lose the despotic manners of the slave-owner ? The advent of free labour demanded of the planters a general reform of manners—a new education. The first free labourers suffered because free labour was at first an exceptional system. The social condition of the majority of agricultural workers—the slaves—reacted upon theirs by contagion. The contract which they had signed was not forced upon them ; they had chosen it from among several proposed by Senator Vergneiro, who had not a Machiavellian mind. But whatever were the clauses of the contract, the consequences would probably have been the same, and the colonists could scarcely have retained complete independence in a society in which slavery was the ruling system.

The condition of the free labourers improved as slavery died out. In 1870 the Minister of Agriculture in Rio dispatched the inspector Carvalho de Moraes on a tour

through the colonies of San Paolo. We possess his report, which it is interesting to compare with the diatribes of Hermann Haupt. It contains less moralising and more facts. According to the report of Moraes, the culture of sugar-cane was still, about 1870, undertaken only by slaves; all other agricultural labour was performed by free labourers. The staff of the *fazenda* consisted in the first place (besides the slaves) of the "comrades." These were nearly always Brazilians, in receipt of monthly wages. They were idle and irregular in their work, and often went from one *fazenda* to another. But they were very docile and easy to manage; their needs and demands were very few, their ambition a minus quantity.

As for the colonists, they lived *en famille*, and were given for their use a house and a field, away from the slaves, who herded together in the out-buildings or dependencies of the *fazenda*.

Domestic duties, the care of horses, cattle and wagons, and the work of transport, were left to the slaves and the "comrades"; the cultivation of the coffee was entrusted to the colonists. The colonists from Holstein were especially valued. The form of contract was rapidly modified; *métayage*—the division of the crop—tended to disappear. From about 1860 onwards the profits of the colonists, instead of being represented by half the price at which the crop was sold, consisted of a sum determined by the amount of coffee yielded by the trees entrusted to them. Their condition was thus becoming more like that of the ordinary wage-earner, or the workman paid by piece-work. Towards 1860 also appeared a new form of contract which was destined to have a great future; it is to-day in general use on the *fazendas*. By this the colonist received, for the care of the estate, a fixed

annual sum per thousand stems of adult trees ; this sum was from 20 to 60 milreis, exchange being reckoned at 27 ; that is, from £2 5s. to £6 15s. ; and in addition to this he was paid at harvest-time a sum of 200 to 250 reis (5½d. to 6¼d.) for each measure of coffee given in at the *fazenda* : a mixed system by which the colonist, while drawing a fixed and guaranteed income, was at the same time a sharer in the risks of coffee-planting, since his profits were larger or smaller according to the abundance of the harvest.

Finally, the contract system was also applied to coffee-planting. Coffee is not productive until the fourth year. The planter who had little capital, and was anxious to avoid all the trouble of an undertaking which only becomes productive after the lapse of several years, came to terms with a contractor, the contractor took over the virgin soil, and undertook to restore it four years later planted with coffee-bearing shrubs. He reclaimed the land, grew maize between the rows of young plants, and at the end of four years charged the proprietor a sum of 10·8 pence per foot of coffee. The men who undertook this work of reclamation were sometimes Germans, but more often Brazilians, natives of Minas.

In place of the primitive contract of *métayage*, which had determined the first relations between the planters and the free labourers, there were thus towards 1870 quite a variety of contracts in use. There was also another and perhaps greater difference to be observed : the colonists no longer came straight from Europe to sign these contracts ; they could usually be recruited in the country ; and the majority of colonies created were merely selections of men who had already worked on neighbouring properties. Side by side with colonists who had immigrated years earlier, the planters also began to recruit native colonists. Moraës speaks of the general

increase in the numbers of Brazilian agricultural labourers on the *fazendas*. The contracts regulating free labour were no longer foreign contracts or exceptional ; they had become a part of the national customs. The abolition of slavery was at hand.

It had been necessary to seek the first colonists in Europe, because the system of slavery had resulted in the fact that the native population was unaccustomed to agricultural labour ; but from about 1880, when the rapid expansion of coffee-planting set in, the necessity of resorting to immigration became every day more urgent ; workers were lacking, so it was necessary to create a new population. Private enterprise was barely sufficient to the task, and the State intervened. The public powers undertook to introduce a new class of rural workers into the country for the benefit of the large proprietors.

Although until then the introduction of foreign immigrants had been a private transaction, it does not follow that the *fazendeiros* had so far received no official support. The Imperial Government interested itself in their efforts and assisted them. It was anxious to see the white population increase. For some years, too, more obvious reasons had induced it to favour European immigration for the benefit of the planters. It feared, in short, that the declaration of the abolition of slavery might alienate the class of *fazendeiros* ; it therefore sought means to win back their suffrages, and assisted them to obtain their staffs of labourers. Senator Vergneiro had received as a loan from the Government the passage-money for the German families whom he established on his land. But the planters became more exacting, demanding something more than mere loans ; they wanted more effectual assistance. They had their way ; the law of the 30th of March, 1870, authorised the Province of San Paulo to expend 600,000 milreis

(£62,500) in assisting the planters to introduce foreign labour on their estates. Such was the origin of State-aided immigration. Later, between 1880 and 1888, other laws were voted, in order regularly to organise the introduction of immigrants, and to grant them free passage to the State of San Paolo.

The planters united to make the most of the favourable arrangements of the authorities. Among the numerous immigration societies which they organised the most efficacious was the "Society for Promoting Immigration," which was formed in 1886, and only ceased its operations in 1895. Its object was to expedite immigration. It signed contracts with the Government for the introduction of a round number of immigrants, whom it then disposed of by forwarding them on to private contractors. Its influence, however, was largely moral ; it was the medium by which the opinion of the great Paulista landowners was imposed not only on the provincial Government, but also on the central Government at Rio. It was towards the downfall of the Empire that these levies of immigrants began to arrive, to be snatched up at once by the *fazendeiros*.

After the fall of the Empire the provisional Republican Government continued the same policy. The Revolution, by transforming the Provinces into States, gave them more independence and greater resources. The State of San Paolo, enfranchised, still further increased its immigration subsidies. In 1895, at the moment when the Union, face to face with increasing financial difficulties, withdrew its assistance, immigration was interrupted in the majority of the States.

In San Paolo, on the contrary, the State consented to bear alone an expense which it had hitherto shared with the Federal Government ; the system of subsidised immigration was maintained. It has lasted, with short interrup-

tions, down to the present time ; and the statesmen of San Paulo have always considered that the expenses entailed are nothing compared with the advantages which the country reaps from it. In 1900 the Minister of Agriculture drew up the balance-sheet of the immigration system. He estimated the expenses met by the State of San Paulo at 34,500 contos of reis,¹ exchange being at 12—that is, a sum of £1,725,000 ; and he concluded that this sum was insignificant beside the development of the coffee trade, which was only made possible by immigration.

It is impossible to follow in detail all the decrees and regulations which have incessantly modified the system of subsidised immigration. Yet the modern world has seen few spectacles to equal this of a Government undertaking the importation of armies of agricultural labourers ; its manner of going to work cannot but be of interest. Until the law of 1889 the system of contracts reigned undisputed. The State used to come to terms with a contractor, who would promise to introduce, for a given sum, a certain number of immigrants. The most colossal of these contracts was signed between the Union and the Metropolitan Company of Rio. It was for the introduction of a million men ; the contractors were unable to fulfil their contract. Instances of contracts to supply forty thousand to sixty thousand immigrants were not rare. A kind of public auction was established, and the client who submitted the lowest tender to the Government, and offered the most reliable guarantees, obtained the contract. These contractors were mostly shipowners. The price paid corresponded more or less to the passage-money : about £5 or £6 per head. This price had to cover not

¹ The sums expended by the central Government under the Empire and the Republic are not included.

(A conto of reis is at this rate equal to £10 : it consists of 200 milreis).—[TRANS.]

only the cost of transport, but the expenses of the propaganda necessary to recruit the immigrants. This system had one drawback. The immigration agents thought only of increasing the number of immigrants; their economic value mattered nothing. The reports of the Secretaries of Agriculture of San Paolo complained that the agents were landing too many men unsuited to agriculture. They refused, on arrival, to go to the *fazendas*; they knew nothing of labour on the soil, and settled in the cities, where they exercised such humble and unproductive callings as that of a bootblack or a seller of lottery tickets. Hence the necessity for supervising the immigrants; a difficult matter at the port of arrival, and one that was finally exercised at the chief port of embarkation, namely, Genoa. The commission established in Genoa in 1895 had to verify the value of the shipments of labourers to San Paolo.

The new system, instituted by law in 1899, is in many respects different. Every year the number of immigrants to whom the State of San Paolo will grant the assistance determined by law is fixed by decree. All navigation companies are authorised, within the limits of this figure, to transport third-class passengers from Europe to the port of Santos, for each of whom they will receive a subsidy, provided the said immigrants are agricultural labourers. The subsidy per head was at first fixed at £2; it has since been raised, and to-day amounts to the cost of the passage. The Government thus avoids engagements at long date, which were inevitable under the system of contracts. By resorting to all the navigation companies at once it obtains, at the precise moment when it judges the country to be in need of labour, the rapid dispatch of a large number of workers, and is then free to suspend its subsidies and reduce its expenses.

These measures explain the enormous influx of immi-

grants. In 1886 the arrivals in San Paolo amounted to no more than 9,500; in 1888, 92,000 were imported; in 1891, 108,000; in 1895, 149,000. Since then the figures have greatly diminished.

At the present time, under the system of intermittent subsidies, the arrivals are very irregular. From 1887 to 1906 San Paolo received more than 1,200,000 immigrants; and in the latter year the population of the State was still under 3,000,000.

				Total Number of Emigrants entering San Paolo.	Emigrants of Italian Nationality.
1886	...	...	...	9,536	6,094
1887	...	...	...	32,112	27,323
1888	...	...	...	92,086	80,749
1889	...	...	...	27,863	19,025
1890	...	...	...	38,491	20,991
1891	...	...	...	108,736	84,486
1892	...	...	...	42,061	34,274
1893	...	...	...	81,739	48,739
1894	...	...	...	54,637	31,548
1895	...	...	...	149,742	106,525
1896	...	...	...	105,624	69,458
1897	...	...	...	105,870	76,451
1898	...	...	...	54,484	34,391
1899	...	...	...	36,012	20,704
1900	...	...	...	27,894	15,804
1901	...	...	...	75,845	56,325
1902	...	...	...	40,386	28,895
1903	...	...	...	18,161	9,444
1904	...	...	...	27,751	9,476
1905	...	...	...	48,087	13,596
1906	...	...	...	48,429	—

Population of the State in 1900 : 2,280,000.

The planters have thus been generously provided with labour. It is because they have been able to draw upon this mass of immigrants that they have shown such disinterestedness in the matter of slavery. Generous as the

official subsidies have been, however, the immigrants were never too many for the requirements of agriculture, so rapid was the reclamation of new soil. In 1894 the appearance of cholera in Europe prevented the regular continuance of the immigrant service. The numbers of the arrivals were reduced ; the planters immediately showed their anxiety ; all were on the watch to snatch up more workers. The State of Minas, the neighbour of San Paolo, was also granting free passages. A portion of the immigrants recruited for the State of Minas, whose destination was the mining district of that State, had to cross the State of San Paolo. They rarely finished their journey, being retained by tempting offers in San Paolo. The State of Minas naturally complained ; the San Paolo Government replied : " It must be remembered that it is difficult to prevent the planters from bribing the immigrants on their way to Minas ; they will very frequently be tempted to turn aside from their destination, especially during their halt in the capital and at Ribeirão Preto." Such was the demand in San Paolo for more hands, and the attractive power of the plantations. Nearly all the immigrants are destined to work at the cultivation of coffee, which the Paulistas call *la lavoure*, labour *par excellence*, just as in France the work of tilling the fields is called *labour*.

The immigrants settle in the different municipal districts in proportion to the area of coffee plantations in each. Among those that absorb the greatest number are Ribeirão Preto, São Carlos do Pinhal, São Simão, Avaré, and Jahu. In 1906, 34,326 immigrants left the capital to work in the coffee plantations. The five municipalities mentioned absorbed about a third of these labourers (11,369). One might well, by following the direction taken by the colonists on leaving the capital, trace out the line of advance of colonisation through the

State, and the successive peopling of the coffee-producing districts.

During the last six years the progress of coffee-planting has been interrupted ; the new-comers only fill the gaps left by those returning. They spread over the various regions of the State in proportions that vary little from year to year.

The immigrants rarely arrive alone. The planter engages not isolated individuals, but families. The Government has always endeavoured to reduce to a minimum the proportion of single men among those introduced at the public expense. The stability of the colonist is to a great extent ensured by the presence of his family ; it makes him less of a nomad. If he has a family one is not so likely to see him re-emigrate at the slightest whim. San Paolo attaches all the more importance to the introduction of emigrant families, because its Government does not give them holdings, so that the problem of their establishment on the soil is not decided beforehand.

Let us follow the colonists from the *hospedaria* of San Paolo—an immense hotel where for eight days they are in receipt of official hospitality—to the *fazenda*.

After landing at Santos the *hospedaria* marks the first stage of their journey. It is there that they contract for their first engagement. Until a recent period the procedure was as follows : the planters in search of labourers used themselves to visit the new arrivals, or send representatives speaking their language. The *hospedaria* was the market for labour ; prices rose when the demand was heavy and the planters competed among themselves ; in the contrary case they fell. The market being public, the colonists could compare the offers among themselves. They are, by the way, less ignorant than is usually supposed ; they know the customs of the country and the average rate of wages, either from experience gained upon



THE "HOSPEDARIA," SAN PAOLO.

previous visits, or from information given by friends or relatives. The contract is never signed for more than a year. Sometimes it is written at the beginning of the wages book in which the mutual accounts between the planter and the labourer are kept ; more often it is made by word of mouth.

In 1906 the Government of San Paolo, wishing to give the immigrants some form of guarantee, created the Agency of Colonisation and Labour. Its duties are to supervise the labour market of the *hospedaria*. It sees that the contracts made are honestly and punctually executed. It serves as an intermediary between the planter and the labourer, and constitutes a national bureau of employment. The planter is required to advise the agency beforehand of the number of colonists he wishes to recruit, and the terms he is willing to offer. He is then allowed to bargain freely with the immigrants, and, the bargain once struck, the contract is officially registered by the agency, which keeps the original text and sends a copy to each new colonist. The agency also serves as an arbitration court in the event of difficulties arising between planter and colonist having reference to the application of the contract. It wields a terrible weapon against any planter convicted of abusing his authority, for it may forbid him access to the *hospedaria*, thus putting him into a position in which he cannot renew his staff of labourers.

All the contracts drawn up under the supervision of the agency are drafted according to the same model ; the text is printed beforehand, and blank spaces are left for the figures. This does not mean that the agency is seeking artificially to standardise the colonising system of San Paolo. The model contract adopted has not been created arbitrarily ; it is in conformity with the contracts in general use, and is merely drafted with an attempt at

greater precision. Before the agency intervened in any way the other forms of contract—that of *métayage*, for instance, which is preferred in Minas—were already spontaneously becoming extinct in San Paolo. The official text as drafted by the agency will therefore give us an exact idea of the usual contracts. Here I translate the essential articles :

Article 1.—The proprietor will gratuitously furnish the colonist with the means of transport for himself, his family, and his baggage, from the railway station nearest the *fazenda* (the Government paying the railway fare) ; the proprietor will also provide a dwelling-house, pasture for one or more animals, and land on which to plant alimentary crops.

Article 2.—The colonist must attend to the coffee-lines, so as to keep them always tidy ; must replace missing trees, remove harmful weeds . . . in the manner and at the moment indicated by the proprietor.

Article 3.—The proprietor will make no advances except such as are strictly necessary for the board of colonists recently arrived, or in case of illness. . . .

Article 5.—If the colonist neglects any of the duties enumerated in Article 2, the proprietor may have the work performed by whomsoever he pleases, and cause the colonist to pay the expenses. . . .

Article 9.—The proprietor who wishes to discharge a colonist must give him thirty days' warning, in default of which the contract will be considered as renewed.

Article 10.—The colonist who wishes to leave the *fazenda* is under a like obligation.

Article 11.—The colonist's cattle and crops are the guarantee of his debt to the proprietor. . . .

Article 13.—The colonist may buy what provisions he may require where he pleases. . . .

Article 15.—The proprietor undertakes to pay the

colonist, per 1,000 stems of coffee attended to, the sum of; per 50 litres (11 gallons) of coffee picked, the sum of; per day's labour (in addition to work on the coffee plantation), the sum of . . .

Article 18.—The last article determines the crops which the colonist will be permitted to grow for his own profit.

An account of the colonist's life on the *fazenda* will serve as commentary upon this contract. Just as the contracts are uniform, so the *fazendas* are alike. I visited a great many during my stay in San Paolo; and the same observations would be true of nearly all. There is scarcely any difference: a more or less perfect equipment in the way of plant, a more or less expensive installation of drying machines and store-houses; but the same picturesque aspect, the same terraces, like great stairs, in the hard-beaten red earth; the same labouring population in clothes smeared with red (the livery of the red soil); the same methods of work, the same gestures, the same cares, the same enjoyments.

The houses of the colonists are not as a rule scattered among the coffee-shrubs; they form, according to the importance of the *fazenda*, a hamlet or village of regular construction, having nothing of the disorder of a European village. To be precise, it is really only a small city of labourers, just as the colonist is only a rural proletariat.* The house is of bricks or mud, often white-washed, and only moderately comfortable, but the climate of San Paolo is extremely mild, and life is passed almost entirely in the open air. As for diet, it is sufficient. Bread is rare, for neither wheat nor rye is a usual crop, but they are replaced by meal prepared from boiled maize, polenta, manioc, and black beans.

* Some of the largest *fazendas* employ from 1,000 to 8,000 colonists.—(TRANS.)

Each *fazenda* constitutes a little isolated world, which is all but self-sufficient, and from which the colonists rarely issue ; the life is laborious. The coffee is planted in long regular lines in the red soil, abundantly watered by the rains, on which a constant struggle must be maintained against the invasion of noxious weeds. The weeding of the plantation is really the chief labour of the colonist. It is repeated six times a year. Directly after the harvest, if you ride on horseback along the lines of shrubs, which begin, as early as September, to show signs of their brilliant flowering season, you will find the colonists, men and women, leaning on their hoes, while the sun, already hot, is drying behind them the heaps of weeds they have uprooted.

Each family is given as many trees as it can look after ; the number varies with the size of the family. Large families will tend as many as eight or ten thousand trees ; while a single worker cannot manage much more than two thousand.

Like the vine, coffee requires a large number of labourers in proportion to the area under cultivation ; it supports a relatively dense population. The two thousand trees which one colonist will receive will not cover, as a matter of fact, more than five to seven acres ; yet the coffee supports other labourers who work on the *fazenda*, in addition to the labourers proper, or colonists. Pruning, for instance, which so far is not universally practised, is never done by the colonists, but by gangs of practised workmen, who travel about the State and hire themselves for the task. The colonist is only a labourer ; if he were allowed to prune the shrubs he would kill them. Heaven knows, the pruners to whom the task is confided ill-treat the trees sufficiently already ! They use pruning-hook and axe with a brutality that makes one shudder.



ON THE DU MONT FAZENDA: A COLONY.
(By kind permission of the Dumont Collee Estate Co., Ltd.)

When the coffee ripens, towards the end of June, the picking of the crop commences. Sometimes, in a good year, the crop is not all picked until November. The great advantage enjoyed by San Paolo, to which it owes its rank as a coffee-producing country, is that the whole crop arrives at maturity almost at the same moment. The crop may thus be harvested in its entirety at one picking ; the harvester may pick all the berries upon each tree at once, instead of selecting the ripe berries, and making two or three harvests, as is necessary in Costa Rica or Guatamala. This entails a great reduction in the cost of production and of labour. San Paolo owes this advantage to the climate, which is not quite tropical, and to the sequence of well-defined seasons and their effect upon the vegetation.

At the time of picking the colonists are gathered into gangs. They confine themselves to loading the berries on carts, which other labourers drive to the *fazenda* ; there the coffee is soaked, husked, dried, and selected, and then dispatched to Santos, the great export market. All these operations the colonists perform under the supervision of the manager of the *fazenda*. A bell announces the hour for going to work ; another the hour of rest ; another the end of the day ; the labourers have no illusions of independence. In the morning the gangs scatter through the plantation ; in the evening they gradually collect on the paths of the *fazenda*, and go home in family groups, tired after the day's work, saving of words, saluting one another by gestures. On Sunday work is interrupted ; games are arranged ; parties are made up to play *mora*, or Italian card games, with *denari* and *bastoni*. Women hold interminable palavers. Sometimes, on an indifferent nag, borrowed at second or third hand from a neighbour, the colonist will ride as far as the nearest town, to see his relations, exercise his tongue,

and pit himself against such hazards of fortune as the world outside the *fazenda* may offer.

What are the annual earnings of the agricultural worker? The conditions vary in different localities, but we may estimate that the colonist receives about 60 or 80 milreis—£4 to £5 7s. at the present rate of exchange—per 1,000 stems of coffee. This is a certain resource; a sort of fixed minimum wage. To this we must add the price of several days' labour at about 2 milreis, or 2s. 8d. A still more irregular element in the profits of a colonist's family is the amount it receives for the harvest. By consulting the books of several *fazendas* I was able to realise the extent of this irregularity. Sometimes the wage paid for the harvest is insignificant, while sometimes it is greater by itself than all the other sources of income put together. It is calculated at so much per measure of berries given in by the colonist. When the branches are heavily laden, not only is the total quantity greater, but the labour is performed more rapidly, and each day is more productive. Years of good harvest are for the colonist, as for the planter, years of plenty. With this important element essentially variable, how can we estimate the annual earnings of the colonist?

His expenses, again, cannot be estimated with any exactitude. An economic family will reduce them to practically nothing, if it has the good fortune to escape all sickness, and so dispense with the doctor, the chemist, and the priest.

What really enables the colonists to make both ends meet is the crops they have the right to raise on their own account, sometimes on allotments reserved for the purpose set apart from the coffee, and sometimes between the rows of the coffee-trees. They often think more of the clauses in their contract which relate to these crops than to those which determine their wages in

currency. A planter told me that he had learned that a party of colonists intended to leave him after the harvest. We met some of them on the road, and I questioned them. "Is it true that you are engaged to work on Senhor B——'s *fazenda* for the coming year?"—"Yes."—"What reason have you for changing your *fazenda*? Will you be better paid there? Don't you get over £6 a thousand trees here?"—"Yes."—"How much do they offer you over there?"—"Only £4."—"Then why do you go?"—"Because there we can plant our maize among the coffee."

The culture of coffee is thus combined with that of alimentary crops. Almost all the world over the important industrial crops have to make room in the neighbourhood for food crops. Every agricultural country is forced to produce, at any rate to some extent, its own food, and to live upon itself if it wishes to live at all. In Brazil the dispersion of food crops is extreme, on account of the difficulties of transport; it is hardly less in San Paolo, in spite of the development of the railway system. Each *fazenda* is a little food-producing centre, the chief crops being maize, manioc, and black beans, of which the national dish, the *feijoade*, is made.

It even happens at times that the colonists produce more maize than they consume. They can then sell a few sacks at the nearest market, and add the price to their other resources. In this way crops which are in theory destined solely for their nourishment take on a different aspect from their point of view, yielding them a revenue which is not always to be despised.

The colonists make their purchases in the nearest town, or, more often, if the *fazenda* is of any importance, there is a shop or store—what the Brazilians call a *negocio*—in the neighbourhood of the colonists' houses. Its inventory would defy enumeration; it sells at the

same time cotton prints and cooking-salt, agricultural implements and petroleum. An examination of the stock will show one just what the little economic unit called a *fazenda* really is. Although the colonists are to-day almost always free to make their purchases where they please, the trade of shopkeeper on a *fazenda* is still extremely profitable. He enjoys a virtual monopoly ; the *fazendeiro* sees that no competitor sets up shop in the neighbourhood. The shop is the planter's property ; he lets it, and usually at a high rent, which represents not only the value of the premises, but also the commercial privilege which goes with it. It is a sort of indirect commercial tariff levied by the planter on the colonists ; a sign of the ever so slightly feudal quality of the organisation of property in San Paolo. The custom that used to obtain, of the planter himself keeping shop for the profit, or rather at the expense of his colonists, has generally disappeared.

One of the most serious of the planter's anxieties is the maintenance of the internal discipline of the *fazenda*. This is a task demanding ability and energy. One must not be too ready to accuse the planters of governing as absolute sovereigns. I myself have never observed any abuse of power on their part, nor have I seen unjustifiable fines imposed. The *fazendeiro* has a double task to perform. He employs his authority not only to ensure regularity in the work accomplished, but also to maintain peace and order among the heterogeneous population over which he rules. He plays the part of a policeman. The public police service cannot ensure the respect of civil law, of the person, or of property. How could the police intervene on the plantation, which is neither village nor commune, but a private estate ? It falls to the planter to see that the rights of all are protected. Many colonists have a preference for plantations on

which the discipline is severe ; they are sure of finding justice then. The severity of the planter is not always to the detriment of the colonist.

Individually the colonists are often turbulent and sometimes violent ; collectively they have hitherto shown a remarkable docility. On some *fazendas*, however, there have been labour troubles, and actual strikes ; but they have always been abortive. The strikes have not lasted, and have never spread. One of the means by which the planters maintain their authority and prevent the colonists from becoming conscious of their strength is the prohibition of all societies or associations. They have had little trouble in making this prohibition respected. Among an uneducated group of labourers, of various tongues and nationalities, the spirit of combination does not exist. We have seen the development of workingmen's societies, of socialistic tendencies, in the cities of San Paolo, but nowhere in the country. An incoherent immigrant population, but lightly attached to the land, is not a favourable soil for the growth of a party with a socialistic platform. One must not look for agricultural trades-unions in San Paolo. The contract between the planter and his labourers is never a collective but always an individual contract.

Accounts are settled every two months. It often happens, even to-day, that the colonist is in the planter's debt. The planter has kept up the custom of making advances, and every family newly established in the country is, as a general rule, in debt. But the advances are always small, the colonist possessing so little in the way of securities ; he has few animals and next to nothing in the way of furniture. His indebtedness towards the planter is not enough, as it used to be, to tie him down to the plantation ; that many of them continue to leave by stealth is due to their desire to save

their few personal possessions, which the planter might seize to cover his advances. At the last payment of the year all the colonists are free; their contract comes to an end after the harvest. Proletarians, whom nothing binds to the soil on which they have dwelt for a year, they do not resume their contracts if they have heard of more advantageous conditions elsewhere, or if their adventurous temperament urges them to try their luck further on.

The end of the harvest sees a general migration of the agricultural labourers. The colonists are true nomads. All the planters live in constant dread of seeing their hands leave them in September. Even the most generous *fazendeiros* experience the same difficulty. According to the Director of Colonisation, 40 per cent. to 60 per cent. of the colonists leave their *fazendas* annually. It is difficult to confirm this statement; but at least it is no exaggeration to say that a third of the families employed on the plantations leave their places from year to year. Towards September one meets them on the roads, most often travelling afoot; the man carrying a few household goods and the woman a newly-born child, like the city labourers at the end of the season. One can imagine what a serious annoyance this instability of labour must be to the coffee-planter. Long before the harvest the planter is planning to fill up the gaps that will appear in the colony directly after the harvest. He secretly sends out hired recruiting agents to the neighbouring *fazendas* or to the nearest town; he employs for this purpose some of the shrewder colonists, to whom he pays a commission for every family engaged. Finally, at the end of his resources, if he no longer has any hope of finding workmen in the neighbourhood who are experienced in plantation work, he decides to apply to the colonisation agent in San Paolo, and resigns himself to the employ-



THE COFFEE HARVEST.
(By kind permission of the Dumont Coffee Estate Co., Ltd.)

ment of an untrained staff, whom he will have to spend several months in training.

The instability of agricultural labour is the most striking characteristic of rural life in the State of San Paolo. It is a result of the unusual and even artificial nature of the hasty development of coffee-planting.

The agricultural workers of San Paolo are for the most part of Italian nationality. It is Italy that has furnished the greatest proportion of immigrants. Many *fazendas* are peopled entirely by Italians, and in some municipalities they surpass in number the Brazilians and the immigrants of all other nationalities together. From 1891 to 1897 the Italians formed three-fourths or four-fifths of the total immigration, according to the year.

What is the number of Italians to-day residing in San Paolo? It is impossible to say precisely. In 1901, according to a report published in the "Bulletin of Italian Emigration," they should have numbered from 650,000 to 700,000.¹ The Italian Consul, turning his attention to the matter in 1905,² declared that the latter figure was notoriously insufficient. According to the statistics of the Secretary of Agriculture in San Paolo, up to the year 1901, 568,000 more Italians had arrived in the country than had left it. To these we must add the Italians who had entered the State by land, crossing the boundary between Minas and San Paolo. We may also count as Italians the children of Italian families born in San Paolo, but in exclusively Italian surroundings, such as most of the colonies afford. Italian families are as prolific in San Paolo as in Italy, and the Italian population has notably increased by the excess of the birth-rate over the death-rate. We may therefore conclude that the Italians in San Paolo number scarcely less than a million. They form there one of the largest and most

¹ "Bulletin of Emigration," 1902, No. 8. ² Ibid., 1905, No. 3.

compact Italian populations that immigration has created overseas.

They are so compact, indeed, that the Paulistas came at last to regard the matter with alarm. The Italian element was increasing with such rapidity that they despaired of ever assimilating it. On various occasions the Government has attempted to limit, in the contracts signed with immigration agents, the proportion of immigrants of Italian blood. But these fears had no foundation. As far as I could discover there is no "Italian peril" in San Paulo. I cannot remember to have remarked, in any Italian established in San Paulo, the slightest tendency to resist assimilation, or the least conscious animosity against Brazil as a nation. All those who are not swallowed up by the plantations, but who settle in the towns, become quickly nationalised, overpowered by an atmosphere in which the Brazilian is naturally dominant. Even those who work on the *fazendas* learn Portuguese rapidly and willingly. I have visited a plantation where the colonists were Italian, the foremen were Italian, and the manager was Italian. Yet it was in Portuguese that the manager gave orders to his compatriots: for the improvement of discipline, so he told me. It was in Portuguese that the foremen spoke to the workers; and on going through the colony I heard the colonists use Portuguese phrases as often as Italian. The family likeness between the two tongues results in the elimination of Italian. A Venetian meeting a Sicilian will speak to him in Portuguese rather than learn the Southern dialect. Those who remain faithful to Italian soon corrupt it and mix foreign words with it. One meets Italians who after a few years in Brazil are incapable of expressing themselves in their native tongue, or who at least cannot do so correctly. This would not be the case in a country whose language was Teutonic.

Now that the current of Italian immigration is arrested or interrupted, the Paulistas themselves agree in declaring that the Italian is the most desirable of immigrants, as much by reason of his sobriety and his capacity for hard work as because he is easily assimilable, and nearly related to the Brazilian in language and in temperament.

On the other hand, the conditions of life which San Paolo has to offer are remarkably adapted to the Italian immigrant. An agriculturist by calling, the Italian has at the same time no particular preference for agricultural work; he does not cross the ocean merely in the hope of acquiring land. He has lived as an agricultural labourer in a world of agricultural labourers, and the blind love of the soil, the infection of landed property, has not yet invaded his blood as it has that of the French peasant. His race does not colonise by instinct as so many other races do. In the United States the Italians are road-makers, miners, railroad labourers, artisans. In San Paolo they are tied down to agriculture, but they have not yet tied themselves down to property in the soil.

If the Paulistas have at times thought of restraining Italian immigration, the Italian Government itself has tried to stop the stream of immigration at its source. In 1902 the General Commission on Emigration, newly founded in Rome by the Ministry of Foreign Affairs, prohibited gratuitous emigration to Brazil. The decree referred solely to the State of San Paolo, the only State which was still subsidising immigration. One may imagine with what anger the news was received in San Paolo. The importation of agricultural workers at the public cost was so deeply rooted in the customs of San Paolo, the existence of agriculture on the great scale was so bound up with the policy of subsidised immigration, that no one had remembered that there was something slightly

irregular in the seduction of foreign workers by the concession of free passages. The Italian Government was strictly within its rights.

Was its intervention actually necessary? One may reply in the affirmative or negative, accordingly as one accepts or rejects the conclusions arrived at in the reports of Signor Adolfo Rossi, the delegate of the Italian Government, which provoked the decree of 1902. But has not Signor Rossi written with a slightly dramatic touch? Be this as it may, the decree of 1902 has very greatly reduced the number of Italian immigrants. In 1901 they were 56,000; in 1902, 28,000; in 1903 only 9,000. Since then there have been years when more Italians have left San Paolo than have entered it. It has been necessary to resort to other countries to obtain the necessary labourers. It is since 1902 in particular that Spaniards and Portuguese have begun to land at Santos; and the Spaniards especially are arriving in ever-increasing numbers, and are becoming more and more in evidence on the *fazendas*.

Signor Rossi's visit to San Paolo, and the decree of 1902, followed closely on the great crisis in the coffee-growing industry. The long period of prosperity which began with the abolition of slavery came to an end about the year 1901. Since then Paulista agriculture has struggled unceasingly and with determination against the fall in prices caused by over-production. How have the workers employed on the plantations been affected by the results of this crisis?

It would have seemed that the first result must be a general decrease in the rate of wages. This decrease has not been very marked. In 1895—that is to say, in the full flush of the development of the coffee industry—the Secretary of Agricul-

ture sent a circular to the municipal chambers inquiring into the precise situation of the immigrant workers. It is not to be supposed that the municipalities would have stated that wages were lower than they actually were. Now, according to the average of these replies, the ordinary payment for the care of 1,000 stems of coffee in 1895 was 90 milreis (£6 with exchange at 16), and the picking was paid at the rate of 500 to 600 reis (8d. to 9'6d.) per fifty litres of berries (per eleven gallons). In reply to an agricultural inquiry instituted by the Federal Minister of Industry¹ in 1907, the commissioner reported that the average figures were 60 to 100 milreis per thousand stems, and 500 to 600 reis per fifty litres of berries harvested. These wages are almost the same as those indicated by the municipal chambers eleven years earlier. They have decreased, but only very slightly; not at all in proportion to the rapid fall of the market price of coffee. We know, moreover, that there is nothing so incompressible as wages, and that no matter what the industry it is almost impossible to reduce them.

But even though we admit that agricultural wages have been slightly decreased, we must not overlook another fact which is entirely to the benefit of the colonists. This is the increase of exchange. Since 1898, the year which saw the first reorganisation of Brazilian finances, the national credit has incessantly improved, and the value of the paper currency has gradually increased. We have seen that exchange was once at 6, and even at 5; it is to-day about 15. This means that a worker whom one pays, as always, in milreis notes, receives to-day just three times as much as he used to in gold. This is a large margin. Wages may have

¹ Report by Joaquim Francisco Gonzalves to the Minister of Industry, published by the *Jornal dos Agricultores* of January 15, 1907.

decreased nominally, but their effective value has increased.

The variations of exchange seem to have had no effect upon salaries. Just as the prices in paper of staple articles have for a long time undergone no modifications, although paper itself has been losing or gaining in value, so wages, by a kind of tradition, have remained at about the same nominal figure. But masters and men are equally aware of what they lose or gain by the appreciation of paper. The planters complain that the rise of paper is ruining them; labour, being paid at a fixed rate in paper which daily becomes more valuable, absorbs a greater and greater proportion of the sale price of the crop, which is always paid in gold. It is to succour the planters that Brazil has adopted measures with a view to checking the increasing rate of exchange, and has created the *Caisse de Conversion*. As for the colonists, they profit in a very striking manner by the high rate of exchange. To the native labourer, who knows no money but paper, the rise of exchange means nothing, as there is nothing for him to measure it by. Not so with the immigrant population, to whom gold coinage is a matter of habit, and even of superstition, and who have in mind the possibility of sending or taking their savings to Europe. The Italians exchange the paper they receive at the earliest possible moment for gold: the money-changers give them English sovereigns at the current rates. How many families possess a little hoard of gold in secret? Gold coin is not confined entirely to the banks in Brazil; it is also to be found widely distributed in the hands of the foreign agricultural labourers. It is therefore obvious that the situation of the foreign agricultural workers has not changed for the worse.

But has not the crisis resulted in the modification

of other clauses of the labour contracts ? Has it not reduced the proportion of the profits which the colonist receives in kind, and limited the crops which he is authorised to grow for his own profit ? On this point it seems to me that the results of the crisis have been more serious. Since 1903 the State of San Paulo has prohibited fresh plantations. Now on recent plantations the virgin soil, newly conquered from the forest, used to yield abundant crops of maize and beans ; in the old plantations, on the other hand, the yield of the cereals sown by the colonists in the intervals between the rows of coffee-trees grows gradually less and less. As the plantation ages, the conditions of the colonists deteriorate, in proportion as the primitive fertility, the privilege of virgin soil, becomes exhausted. Moreover, many planters who are anxious to run their plantations in a more rational manner are endeavouring to put an end to the raising of crops between the rows of coffee. This makes life less easy for the colonist.

Even when the planters allow them land outside the lines of the coffee on which to grow their food crops, the colonists are discontented. On the plantation itself they used to cultivate their crops while weeding among the coffee-trees ; the same labour profited both crops, and the maize crop cost no extra labour. To plant the maize in separate fields means to double the labour without doubling the profit.

Finally, to understand thoroughly the material and moral situation of the colonists we must not confine ourselves wholly to purely agricultural questions. The colonists do not regard themselves as tied down for their whole lives to the production of coffee ; many of them, on occasion, leave the plantations to settle in the towns. Not all the labourers leaving a *fazenda* after the harvest re-engage themselves upon other *fazendas* ; each year the

season of harvest is followed by a fresh concentration of the rural population upon the urban centres. This movement is incessant, and explains why the need of labour is still felt in the country, although the expansion of the plantations is arrested. All the towns in the State, including the capital, are full of old immigrants who have broken with plantation life. The labourer becomes a shopkeeper in the city, and his chances of success increase with the prosperity of the country. Formerly the success of one would encourage the rest, and there were few colonists on the *fazendas* who were not sustained in the mediocrity of their lot by the hope of one day improving it, and of profiting by the feverish activity of the business world and the general abundance of money.

But the crisis has struck the commercial quite as heavily as the agricultural classes; the towns have suffered little less than the country; money has become scarce and hard to win. As for the colonists, it is not so much their present position that has changed as their hopes; their confidence in the future of the country has diminished.

We must not be astonished that under these circumstances there has of late years been a tendency to emigrate at the expense of the State of San Paolo. All countries largely populated by immigration have suffered such an exodus at one time or another. San Paolo, like the United States and the Argentine, has suffered the common lot. The first year in which the statistics of emigration revealed an excess of departures over arrivals was 1900. A like excess occurred in 1903 and 1904. In 1903 the departures were 36,000, and the balance was 18,000 against San Paolo. In 1906, 41,000 third-class passengers left Santos; but equilibrium was re-established by an increase in the number of immigrants. Thus the unreliability of the rural workers,



COFFEE PLANT : PULPING HOUSE AND FERMENTING TANKS.
(By kind permission of the Dumont Coffee Estate Co., Ltd.)

which had been proved for a long time by their annual fittings from plantation to plantation, manifested itself finally in another way, and one far more harmful to the interest of the State : by emigration to other countries.

It is after the end of the harvest, from August to November, that these departures take place. The emigrants are never Paulistas by race ; they belong to the foreign immigrant population, and are mostly Italians. The majority have returned to Italy, but a numerous remnant has gone to the Argentine.

DEPARTURES OF EMIGRANTS FROM THE STATE OF SAN PAULO.

		For Europe.	For the Argentine.
1904 (August to November)	...	10,204	5,541
1905	"	8,600	6,878
1906	"	9,202	8,367

The numbers of the immigrants who left the country as emigrants to the Argentine were especially disquieting. Were the sums paid by San Paulo in passage-money merely to benefit a fortunate neighbour ? In December, 1906, an inquiry was instituted on the subject of this exodus of colonists bound for the Argentine. A little investigation threw a great deal of light on the international movements of labour, which are one of the peculiar characteristics of the New World.

What were the underlying motives of this exodus ? The harvest ending in October, 1906, had been especially abundant, so that the colonists were left with money in hand. But the harvest of 1907 threatened to be more than usually poor, and the demand for labour in San Paulo was limited. On the other hand, exchange was high ; Brazilian paper could be exchanged for foreign gold with advantage. These causes provoked the exodus in the first place ; in the second place the world of inn-keepers, money-changers, steamship agents, and so forth,

who profit by the movements of labour, contributed by its propaganda to stimulate the movement. Such are the secondary causes revealed by the inquiry. As for the general cause, it was the economic crisis through which the country is passing; once the crisis is over immigration will once more set in.

The concentration of the rural population in the towns and the emigration of so many workers have reduced the labour obtainable in the rural districts of San Paolo. Many *fazendas* are short of hands; either they cannot recruit a sufficient number of families, or the families are not sufficiently ample. The Spanish families, which in some districts are beginning to replace the Italians, do not remain grouped, like the Italian families, in regular tribes, one of which would often take charge of 10,000 coffee-trees.

What resources are left to the planter under these circumstances? In default of foreign immigrants he engages native workmen by the day; but the work is badly done and the expense high. Or he may attempt to reduce his staff, and to cultivate his plantation by machinery. A kind of harrow is driven down the lanes between the coffee-shrubs, turning the soil without wounding the roots. Labour is like to be driven out by machinery: a profound transformation in rural life which has so far been effected nowhere in Brazil, but which seems to-day to be commencing in San Paolo. This change forces the *fazendeiro* to increase his teams of oxen, and promises years of prosperity for the cattle-breeder. But a factor which prevents the general use of ploughs or harrows is the large number of hands required for the harvest; the colonists are hardly numerous enough as it is. The further the number of yearly labourers is decreased, the greater, at harvest time, will be the disproportion between the hands required and the

hands available. Where can these extra hands be found during the season of picking? Each *fazenda* has to be self-sufficient.

Moreover, every planter does his very utmost to retain his staff. But the colonists are in love with their independence, and refuse all engagements for more than a year. They know very well that the need of the planters is their guarantee of good treatment; to-day, for example, it is very unusual to hear of planters who are bad payers, as one did a year or more before the crisis. The sequence of things has been as follows: the coffee crisis, by impoverishing the State of San Paulo, reduces the number of immigrants, and becomes indirectly a factor which tends to better the lot of the agricultural labourer.

The crisis has brought to light the most serious danger of the policy of subsidised immigration. Not being proprietors, the Italian colonists remain imperfectly bound to the soil. They have been given a subordinate place as labourers, and they will only serve as long as they are offered generous terms. The crisis, which shows no signs of lifting, but is rather becoming more oppressive, must profoundly disorganise this rural community, which was only in process of constitution. At the outset the crisis was purely economic; it must soon become social. It will prevent the normal absorption, which was already in full operation, of the numerous foreign elements introduced to the profit of the planters. This is a point which must not be overlooked if we would understand the grave forebodings which the crisis has awakened in the Brazilian mind, and the sometimes hazardous measures which the State has been led to take in the hope of protecting the coffee-producing industry.

CHAPTER IX

SMALL HOLDINGS IN SAN PAULO

The social importance of the small proprietor—Obstacles to the development of the system of small freeholds—The distribution of the soil in the Campinas region—The new colonies in San Paolo.

WE have studied the relations of the coffee-planters to their agricultural labourers; we must now inquire into the status of small ownership in the State of San Paolo. Although large ownership is the rule, small ownership is not unknown. The laws of succession tend here, as elsewhere, to divide inheritances. Side by side with the plantations one finds properties of smaller dimensions—*sitios* or *chacras*. Beside the private colonies, established by the planters on their own estates, and peopled by agricultural labourers, there are also colonies of small landowners, founded by the Government. The word colony is often employed to denote a colonial holding. *Fazendas*, *sitios*, *chacras*, and colonies: such are the various types of rural holding.

The agricultural statistics are too imperfect to allow of any comparison of the relative importance of these various types of holding. In 1905, according to the data published by the Minister of Agriculture, there were in all 56,931 properties in the State of San Paolo, covering an area of some 30,000,000 acres. Their average area

SMALL HOLDINGS IN SAN PAULO 219

would thus be more than 500 acres. As a matter of fact only a portion of the total area is under cultivation ; the rest consists of unproductive forests, savannahs, and natural pastures. It is in the central portion, where capital is more plentiful, that the small properties are most numerous (in the coffee belts, on the contrary, they are the exception), and on the railway system of the Mogyana, Paulista, and Sorocabana lines.¹

Certain municipalities, in order to obtain a basis for the collection of the municipal tax upon crops, have drawn up a schedule of rural properties. In the municipality of Ribeiraon Preto, for instance, which is one of the chief coffee centres, there exist about 30,000,000 trees divided among 285 proprietors. Each of these possesses, on the average, more than 100,000 trees, which would require a staff of from 50 to 100 labourers. Now the municipality of Ribeiraon Preto may be regarded as representing faithfully enough the general conditions of the whole

¹ The statistics of the Ministry of Agriculture give the number of small properties, but neglect to state the total area which they occupy, so that we have no means of knowing the precise distribution of the soil. The properties are classified according to their area :—

Properties of from—				1st District. Belt of the Mogyana.	2nd District. Belt of the Paulista.	3rd District. Belt of the Sorocabana.
0 to 60 acres	...	...	...	3,605	2,322	2,602
60 to 150 „	...	...	...	2,312	2,206	2,242
150 to 600 „	...	...	...	2,671	3,139	3,606
600 to 6,000 and over	...	...	...	2,113	1,824	2,154
Approximate total area ...				6,175,000	6,300,000	9,380,000

Supposing all properties of the first category to be of 60 acres in extent—which of course they are not—and all those of the second category to be 150 acres in extent, a figure which would be as much above the reality as the first, it is easy to calculate that the small properties of less than 150 acres would form a maximum of only 9 per cent. in the first district, 7 per cent. in the second, and 5 per cent. only in the third.

country. If the number of estates to the unit of area is greater there than elsewhere, at the same time certain portions of the municipality contain very small holdings planted with coffee : a state of affairs which scarcely exists in any other part of San Paolo.

The social significance of the development of small freeholds has nevertheless always been evident to the Paulistas. The programme of free immigration for the benefit of the large planters has always been opposed by some, who have upheld the example of the southern provinces, and the success of the system of colonisation by means of small properties as tried in Rio Grande. In 1870, when the annual coffee crop did not amount to a twentieth part of the modern crop, and before the great expansion of agriculture in San Paolo, a discussion between two planters was opened in the *Campinas Gazette*. The first, a faithful representation of the majority of *fazendeiros*, demands that the provincial assembly should assist the planters in obtaining labourers from Europe to work on the plantations. The second replies that the country does not require huge agricultural properties ; that small estates and a numerous class of small proprietors will create a happy nation and make it energetic, hard-working, intelligent, and wealthy. The division of land, says this philosophical planter, is as necessary to the progress of a nation as the division of labour.

About this period it seemed highly probable that the small landowner would arrive in the natural course of events, and without official intervention, to conquer the soil and entrench himself strongly in San Paolo. The inspector Carvalho de Moraes, during a tour through the leading coffee plantations, reported an increasing number of small proprietors around the towns of the centre. There were thirty between Jundiáhy and Campinas, along the old and the new road, a hundred round Cam-

pinas, and as many between Campinas and Limeira. A few miles distant from Limeira thirty-six families had created a small colony on an old abandoned *fazenda*; a colonist with his sons and sons-in-law had bought a portion of the *fazenda*, and marked out other allotments at his own expense, which he then sold to other families. At the same time a compact group of Germans had bought land near Campinas and had founded the village of Nova Fribourg. They have remained there ever since, and form the only German community which to my knowledge exists in the State of San Paolo. Near them some Swiss had settled at Nova Helvetia. These people were nearly all plantation labourers, who had come from Europe without capital. Having put together some savings, they profited by the experience gained during their first few years in the country to cultivate the soil for their own profit.

It was also near Campinas that a number of immigrants had settled who came to San Paolo from the south of the United States at the end of the War of Secession. An agent acquired on their behalf the ancient *fazenda* of Funil. These American families brought their small capitals with them, which they employed in buying land. Beside Nova Fribourg and Nova Helvetia the Americans built their Villa Americana. These three names, isolated as they are in the State of San Paolo, recall at once the small property movement which was witnessed by the last generation, and the essential part in that movement which was taken by the foreigner.

Instead of progressing step by step, the movement found itself suddenly arrested. It had come upon an insurmountable obstacle: the spread of the coffee plantations.

The first consequence of the coffee boom was the rise in the price of land; and the small property system can be

instituted only where land is cheap. The boom in land passed all bounds ; towards 1895 properties in working order were being sold at the rate of 4 and 5 milreis per stem of coffee, or £48 to £64 per acre. As the operation of planting was not costly, suitable soil when unplanted sold for almost as high a price. Apart from the beds of red earth, which were especially fertile and coveted by all, the prices have decreased ; but they are still ten times as high as in other parts of southern Brazil ; in Paraná, for instance, £3 to £8 is an ordinary price per acre. Even the prices of colonial allotments, which are offered for sale by the Government, at a figure appreciably lower than the market value, are still high. At Nova Europa, considerably to the west of the already settled districts, the price is £2 10s. to £3 4s. per acre ; at Campo Salles, £2 only ; around Campo Salles some landowners are offering land at £2 14. Land bearing timber trees or trees suitable for fuel costs more. Nowhere in the State can cultivable land be bought at a lower price.¹ The purchase price of a freehold of sixty acres, on which a family might live, would be beyond the resources of the majority of colonists ; they can no longer hope to become proprietors.

The cultivation of coffee was always practised on a large scale. Coffee undergoes on each *fazenda* the numerous operations necessary before it can be delivered

¹ It is interesting to note that in the Argentine the Governmental policy, and also the policy of many speculators, agents, and landowners, is to sell small properties on the instalment system ; and so low are the prices, and the crops so abundant, that the purchaser can often complete his purchase at the end of a year. The great lucerne pastures of the Argentine require few hands, and reaping, even on the small properties, is done by machinery. This being so, there is not the same desire to obtain a floating population of labourers ; the policy has always been to settle the immigrant on the soil, so as to obtain his partial services when required.—[TRANS.]

to the exporter. The equipment of the *fazenda* includes tanks of cement or masonry in which the berries are soaked, terraces on which they are exposed to the sun, machines for husking, sorting, and packing them in bags, and the hangars or warehouses in which the crop is stored. Beside these buildings and structures the dwelling-house, which is often of modest dimensions, almost disappears. A *fazenda* thus represents a heavy capital, and the Paulista planters themselves could never have obtained such capital without the financial support which they have received, particularly from the great export trade of Santos. Such an industrial organisation could not well adapt itself to the system of small freeholds.¹

The cultivation of coffee has attached the Paulistas to the system of large freeholds. The soil offered them wealth ; agriculture was the most fruitful of speculations. They accordingly became agriculturists, and refused to give up an acre of their land. The love of the soil infected the Paulista aristocracy as it had already obsessed other aristocracies. Even had they been rich enough to buy small freeholds, the labourers of San Paolo would not easily have found land to buy.

Nowhere were they granted those contracts, so com-

¹ Obviously the existence of co-operative plant would enable the small proprietor to hold his own against the rich planter. But co-operation is seldom established from below, and when supported officially is sometimes suspected by those who would profit by it. It is, moreover, hardly probable that the Government would succeed in any course of action which would raise up competitors against the rich planters, even were the coffee market not overcharged already. However, the small planter's chance might come were some of the larger planters, intimidated by a long period of low prices, to sell out entirely, or devote smaller areas of land to more varied and profitable cultures ; in which latter case over-production would gradually become less extreme.—[TRANS.]

mon in most new countries, by which services are partially paid for in land instead of in money, and by means of which a class of peasant proprietors is established automatically. Even *métayage*, which was still employed in Minas, was eradicated in San Paolo, as a sort of pale reflection of peasant proprietorship, and the agricultural labourers were kept carefully in hand as wage-earning labourers.

The Government might at least have struggled against the tide, might have encouraged the establishment of peasant proprietorship ; but it is dominated by the large planters ; the employers of labour are still in power. The advocates of the small freeholder meet with a powerful and organised opposition ; they receive no official encouragement. All the public resources are employed in obtaining labour for the plantations. In 1897 the Minister of Agriculture said : " The suppression of the stream of subsidised immigration by the Federal Government makes it more than ever essential that the State of San Paolo should for years to come concern itself before all with the introduction of labour for the large plantations, which find themselves reduced to the sole resource furnished by the funds of the State Government. It is also indispensable that practically every immigrant introduced should be engaged as a wage-earner upon the *fazendas* ; the settlement of immigrants in groups or colonies must be postponed until a remoter period, when our employers no longer suffer from the lack of the actual instruments of labour."

Public opinion seems to have changed in this respect ; it is the coffee crisis that has caused this change. The instability of the world of agricultural labour has given rise to general anxiety. Must the intervention of the Government, and the unending consequent expense, be continued indefinitely, incessantly to renew an immigrant

population, which it was thought would have been permanently assimilated, while in reality it is now visibly dissolving and disappearing? Are the colonists of the *fazendas* to continue to look to their European homes, to send their savings out of the country, and to impoverish the Paulista people? There is only one remedy for such dangers: the extension of peasant proprietorship.

At the same time people have been opening their eyes to the dangers of a single crop—of what we may call monoculture. Until the crisis it was the ambition of San Paolo to specialise in the production of coffee, and to neglect all other products. The famous saying was taken literally: “Coffee will suffice for everything”—*O café dara para tudo*. It mattered nothing that flour had to be imported from Buenos Ayres and cattle from Minas. The sale of coffee covered all these expenses.

But the market price of coffee fell. The nation must economise; must itself produce what it consumes, and seek other products for exportation. The Government establishes experimental farms; favours new agricultural industries; undertakes the establishment of rice-fields, dairies, and what not. To put an end to monoculture would be still further to favour the small property system. If the culture of coffee is prohibited to such a system it is, on the other hand, adapted to almost every other kind of production, as well as to cattle-breeding, kitchen-gardening, &c. Sugar-cane can with advantage be raised by small proprietors, whether they take their cane to the factory, or whether they own a primitive crushing mill themselves; or, being unable to make sugar, produce spirit only.

Yet life in San Paolo is so bound up with the culture of coffee that the new policy of colonisation would have had no chance of becoming popular if the planters them-

selves had not finally supported it. They were more alarmed than any one by the instability of agricultural labour, for a lack of hands at the moment of harvest might result in disaster. They reflected that by establishing colonist proprietors at a short distance from the coffee plantations they would have at hand a body of workers who would necessarily be faithful, to whom they could apply at the necessary moment. "We must settle the immigrants on the soil," says the report of the Minister of Agriculture for 1901; "but this must be effected so that they will be at the disposal of the large proprietors when the latter have need of their labour." And the report for 1904 goes on to say: "The fact of having at hand in the colonies a reserve of labour for the harvest would enable us to transform and industrialise the cultivation of coffee, and to reduce the expenses of production by doing away with the necessity of supporting throughout the whole year the number of labourers required at harvest-time." This argument sealed the alliance between the supporters of large and small properties.

Since 1886 the Government had almost entirely abandoned its policy of aiding colonisation: indeed, the last official attempt at colonisation took place about that date. At that time were created or organised several centres which to-day have been long emancipated: Santa Anna, São Bernardo, Barão de Jundiáhy, Antonio Prado, Boa Vista, &c. Their fortunes were various; some developed with extreme slowness. At São Bernardo the experiment was made of planting vines, but the phylloxera destroyed them. Barão de Jundiáhy, near the town of Jundiáhy, and Antonio Prado, near Ribeirão Preto, enjoyed the best situations. The colonists had completed payment on their allotments by 1892.

SMALL HOLDINGS IN SAN PAOLO 227

But from 1886 to 1904 this colonisation was interrupted. The movement was resumed only twenty years later—in 1905—at the moment when the coffee crisis was at its height—and under the influence of one of the most ardent advocates of polyculture and peasant proprietorship, the Minister of Agriculture, Carlos Botelho. In 1905 the Government decided to enlarge the ancient colony of Campos Salles. The same year it founded the centres of Nova Odessa and Tybiriça ; at the beginning of 1907, those of Nova Europa, Nova Paulice, and Gavião Peixoto. At the same time, it imposed on the leasehold Sorocabana Railway Company the obligation of founding colonies in the vicinity of the line. The law of December 27, 1906, determined the conditions under which colonies were to be established, the dimension of the allotments, which would be of 123 to 617 acres in area, and the price of land to be fixed upon in the various centres of colonisation. The colonists were to complete the payment of their allotments in ten annual instalments. Unhappily there are no more public lands, except in the extreme west, out of reach of the means of communication and the markets, and in districts where colonisation would not be likely to succeed. The remote situation of the remaining State lands explains why the Government was obliged to buy privately owned lands in order to cut them into lots and offer them for sale.*

It is as yet too soon to judge of the success of these experiments in colonisation. We may hope, however, that the money spent will bear fruit. The State of San Paolo offers a first-class market to an agricultural population: a great city, numerous small market-towns, and the most concentrated population in Brazil. The prices

* Contract concluded with the *Pequena Propriedade* Company in 1905 before the foundation of Tybiriça.

of agricultural produce are higher in San Paolo than in all the rest of southern Brazil. Timber even, which has no marketable value in the greater part of the country, may furnish the colonists with a supplementary source of income in San Paolo. Colonisation has its place ready in the national organism; its mission will be to nourish the world of labour. Can we not foresee the time when the great coffee industry, concentrated on the richest soils, will be surrounded by a fringe of small properties, of subordinate cultures, associated with it, living by it, and at the same time giving it life?

Among the colonies of recent foundation some have been founded in the west, on the borders of the *sertaon*, and on land as yet uncultivated; others, on the contrary, are established in the very heart of the State near the city of Campinas, the first centre of expansion of peasant proprietorship. Campos Salles and Nova Odessa are not far from the old spontaneously formed colonies of Nova Helvetia and Villa Americana. In this old agricultural district, partly abandoned by the large landowners when they went northward in search of less exhausted land, colonisation has a more favourable soil for expansion than in the heart of the great coffee belts. The colonists will succeed, by dint of labour, in re-fertilising the soil deserted by the *fazendeiros*.

Several days of travel through the country around Campinas gave me the most favourable impression as to the future of these colonies. First of all I visited Campos Salles; the clearing of the land was progressing rapidly; already the colony had exceeded its official limits, and was beginning to surround the large estates; its population was on the increase. The colony was beginning to exert a power of attraction; some Italian labourers from the neighbouring *fazendas* had come to settle there, knowing that they could obtain land there; a town



HARICOTS : NOVA ODESSA.

was springing up, appropriately entitled Cosmopolis, for it counts among its inhabitants the representatives of sixteen nations. The resources of the colonists are numerous ; merchants come to Cosmopolis to buy the crops of maize and beans : a sugar-factory takes their canes ; and finally the colony owns a herd of three hundred cows, and sends its milk and butter as far as Campinas and San Paolo.

We rode many miles on horseback, over soil that was softened by the first storms of September, reining in before the houses, and translating into all the tongues within our compass the same set of questions. The colonists appeared contented ; they were reducing their debt towards the Government regularly ; they were gradually improving their agricultural and household equipments. The last colonist at whose house I stopped was a Frenchman ; a Breton peasant, with a rough, curly head, who might have stepped out of a canvas by Lenain. He had received with his allotment a brick-built house ; but being a rough sort of fellow he had considered it too luxurious, and had given it up to a tenant, building for himself a more rustic dwelling-place with the trunks of trees felled upon his land. There he lived with his wife, Breton also, and his children ; he offered me a taste of maize bread, and we sat down round his table. Beyond the open door we could see the wet ploughed land, and the forest at the end of the red furrows. He then showed me the mules, the wagon, and the plough which the last harvest had enabled him to buy. When we were in the saddle again he followed us to the end of his land, the pride of property shining in his eyes.

On the morrow I arrived at Nova Odessa. There the first colonists were Russian Jews, who had come from London, where they had taken refuge. They, it seems,

had little aptitude for agriculture; they had hardly settled before they dispersed. They were replaced by Lithuanians, Lutherans or Anabaptists, who to-day form the whole population of the colony. Around the houses were little kitchen-gardens, and fields of harvested maize or sweet potatoes. On the roads we met *moujiks* with great beards, powerfully built, still wearing the boots and blouses which they brought from Russia. The women, who wore folded handkerchiefs on their heads, were laboriously hoeing the fields, or imperiously leading their cows by a halter. Fair-haired little girls and blue-eyed, light-skinned boys were running in and out of the huts; we might have been half a world away; until we encountered, on the moist, red road, great ox-wagons driven by negroes, and remembered that we were in Brazil. In the distance, at the foot of the hills, were the white houses and the belfry of Villa Americana. Here and there we came upon sickly-looking fields of cane, or rows of abandoned coffee-shrubs, invaded by weeds, left to run wild by the administrator of the colony; all that was left of the great crops raised there formerly by the *fazendeiros* who were the first owners of the soil; an inheritance which the small proprietors despise.

Has the creation of these colonies provided the coffee-planters, as was hoped, with a reserve of labour available at harvest-time? Here again we must wait a few years before replying. The Government offers all colonists who will engage themselves for the harvest free transport to the *fazendas*. But migrations of this kind can only be organised slowly. Perhaps the movement of labourers at the time of the harvest will one day be one of the leading characteristics of country life in San Paolo. For the moment they do not amount to much. In 1906 the Government provided the *fazendas* with 16 gangs of pickers—815 persons; 61 families only came from the

SMALL HOLDINGS IN SAN PAOLO 231

colonies of Tybiriça, Nova Odessa, and Campos Salles. It is often difficult to persuade the colonists temporarily to abandon their allotments to go harvesting coffee; they will consent more willingly when time has created habits of life and settled relations.

Small ownership, it seems, must be developed in San Paolo by the side of and in the intervals of the great coffee plantations. But is it wholly impossible for coffee itself to be cultivated by the small proprietors? Is this citadel of the great landowner really impregnable, really without a breach? Cannot we imagine a form of the coffee industry adaptable to small properties?

For example, could not a co-operative society take the place of the rich coffee-planter—a society owning the necessary plant of machinery and so forth, which it would place at the disposal of the small growers? The Paulistas themselves have thought of this solution; such is the programme of the co-operative society of Orlando, which was in process of formation when I left the country, and whose statutes I was enabled to examine. Its peculiarity resides in the fact that it is in no way an association formed among small proprietors; but proposes, on the contrary, to create small properties and to make them feasible. According to the statutes, agricultural workers having received land of their own to work would find themselves, at the expiration of their contracts, members of the co-operative society, and common owners of the machines for shelling and cleansing the coffee which would be the central fact and the *raison d'être* of the association.

The co-operative association of Orlando is so far only a scheme. But on the outskirts of Ribeirão Preto there is a quarter, Morro Cipo, entirely peopled by Italian peasants, who are small proprietors in business for themselves, cultivating miniature coffee plantations with their

families, without the aid of labourers. The more well-to-do own 20,000 trees ; others 10,000 or 5,000. A few have less than a thousand. The problem of adapting the coffee industry to small properties has here been solved in another manner. As each of these Italians cannot become possessed of the necessary plant, they take their coffee into the town, where a manufacturer undertakes to subject the berries to the indispensable processes, and pays himself by reserving a certain proportion of the crops. Once it is no longer essential for the planter himself to possess the machinery for preparing coffee for the market there will no longer be any reason for growing coffee only on the grand scale. These Italians are apparently living in comparative affluence ; the crisis has not seriously affected them. Their working expenses are almost negligible, and the sale price of the coffee is for them almost a net profit. They are not troubled by the thorny question of how they shall obtain labour, which is for ever tormenting their neighbours, the *fazendeiros*. Finally, they grow, besides coffee, many fruits, vegetables, &c., for which they find a market in Ribeirão Preto. Their womenfolk take charge of this part of their business.

But the co-operative society of Orlando is as yet only a scheme, and Morro Cipo is an isolated example, and therefore not wholly conclusive. The division of the soil there is not of spontaneous origin, Morro Cipo being only the one-time *fazenda* of Antonio Prado. I succeeded, not without some difficulty, in hunting up the titles of ownership delivered by the Government to the first colonists, which have passed from hand to hand. Although the present owners are not those whom the administration settled in the allotments, it is only by official intervention that small ownership has been able to maintain itself in a region where the usual system

is so entirely different. The action of the Government has not been without fruit, but it was not capable of producing any profound revolution in the face of the general tendency. What it created has endured, but the colonial germ, isolated in the midst of a region unfavourable to small ownership, has not transformed the country to its own likeness. Directly after the colony was founded the cultivation of coffee spread towards the hills of Ribeiraon Preto, and the town grew; the colony was lost sight of amidst the prodigious expansion of the coffee industry; and to-day the existence of the little freeholds of Morro Cipo seems a strange economic anomaly to those who have forgotten their origin.

The co-operative society of Orlando and the colony of Morro Cipo prove at most that there is no logical incompatibility between the cultivation of coffee and small ownership; but it would be a mistake to conclude that there is as yet any active movement with the object of dividing the large estates. The crisis itself has not given rise to any sensible modifications.

Many *fazendas* have been sold, but they have always been sold entire. The fall in the price of land has not been in proportion to the decrease of revenue. Every one in San Paolo is interested in checking this fall, or at least in disguising it as far as possible. There are many *fazendas* which are mortgaged, or whose owners are insolvent; yet they are not sold, because the creditors are hoping for a rise in the price of coffee, and are waiting for more favourable conditions. In the coffee-producing districts there are no more parcels of land available for sale than there were ten years ago. The Italian consul stated in 1905¹ that two hundred families had left Santa Rita, all of whom had accumulated savings, and would have employed them in

¹ *Bulletin de l'Emigration italienne*, 1905, No. 3.

purchasing land if they had found any land for sale. Similarly, the sons of the peasants of Morro Cipo can find no land to buy in the neighbourhood of Ribeirão Preto; they are leaving their homes in order to settle in the extreme west, at the end of the Paulista railway, beyond Araraquara.

To sum up: small ownership has obtained no foothold in the coffee districts. It will apparently become more common on the outskirts of the coffee districts; it is already firmly established in several cantons in the centre of the State; but hitherto it has not made a breach in the regions of the large estates. As a coffee-producing country the State of San Paulo remains perhaps the most definite type in the world of a country of large landowners. In the contemporary history of San Paulo two facts go hand in hand: the constitution of a landed aristocracy, and the persistent predominance of the old Paulista race. If the old Paulista families have retained possession of the "red lands," while in Rio Grande and Paraná the soil is passing in its entirety into the hands of immigrant populations, it is only just that this should be so. It is to their capital part in the development of the coffee industry, to their energy and activity, that the Paulistas owe the fact that they have not been dispossessed of their native soil.



A RICE FIELD, SAN PAOLO.



CHAPTER X

THE VALORISATION OF COFFEE

Protection and the coffee industry—The coffee crisis and its causes—Over-production—First plans for checking the crisis—Preliminary negotiations with the Federal Government—The intervention of San Paolo on the coffee markets—The formation of valorisation stock—Liquidation—The dangers of protection.

To one who understands the agricultural organisation of San Paolo, it is possible to understand the importance assumed by the "valorisation of coffee" movement in which San Paolo and Brazil itself have been recently engaged. Valorisation is the struggle undertaken by the Government of San Paolo against the falling prices of coffee. By means of valorisation it endeavours to save the coffee industry from disaster, just as by the system of gratuitous immigration it had supported the industry during its time of expansion. Both policies are only two episodes of a policy of protection, the principle of which may be contested, but which has been followed for twenty years with remarkable fidelity and consistency.

The general nature of the operation entitled valorisation is well known. To avoid the rapid fall in the market value of coffee consequent upon an exceptional harvest, the Government of San Paolo bought enormous quantities of coffee at its own expense, which it now holds in reserve, and which it proposes to keep until high

prices will allow of its gradual sale without injury to the market. The stock of coffee now existing in the world is thus at present divided into two parts; one is in the hands of the trade and one belongs to San Paolo, and is not at present for sale.¹ The consequence of valorisation has been a diminution of the commercial stock.

I have no intention of attacking the San Paolo Government, nor yet of defending it. The valorisation of coffee has already given rise to sufficient polemics; it deserves an impartial examination. It was an enormous financial operation, courageously undertaken by the Paulista statesmen; it was also a real innovation in the world of political economy; a new form of protectionism² or the intervention of a Government in a branch of commerce.

It is not generally understood how the State of San Paolo was induced to take this resolution. Valorisation appeared to be an act of desperation, or a sudden freak; the manner in which the operation was effected was regarded with suspicion. Even in Brazil the policy met with the bitterest enemies, and had the misfortune to be attacked by the leading Brazilian journal, the *Jornal do Commercio* of Rio; while in Europe the prejudice was of long duration, for in July, 1907, at the time when the transaction was apparently about to enter its period of liquidation, the financial journal *Le Brésil* was still declaring: "We remain none the less convinced, whatever the special conditions and the exceptional circum-

¹ Written in 1909.

² Protectionist not in the halfpenny newspaper sense, but in the sense of the old Corn Laws, being not a measure to protect one class from taxation by taxing another, but a policy intended simply to protect the industry by which the State and the landowners and most of the proletariats live; yet differing in one very important factor from the Corn Laws, in that the increased price of the product does not tax the whole nation's food, but only the luxury of other nations.—[TRANS.]

THE VALORISATION OF COFFEE 237

stances which may, from the economical or the political point of view, have evoked State intervention, that valorisation was an adventure, a random speculation . . . that it is not the part of the State thus to hazard its financial resources on a game of chance or the mercy of Providence ; and, finally, that the State of San Paolo was wildly imprudent to attempt such a course." A very summary verdict in a case of which the public has not heard the details.

The sole cause of the coffee crisis was over-production. Production having increased more rapidly than consumption, the market was necessarily glutted ; hence the bottom fell out of it.

Statistics prove that an increased production has not been general, and has not affected all the coffee districts of the world ; many, on the contrary, are in a state of decadence. At Martinique all the plantations are abandoned. The entire extra-Brazilian production of coffee has only maintained its former dimensions. The total increase comes entirely from the progressive yield of Brazil, and principally from the increased production of San Paolo. From 1870 to 1875 the annual crop for the whole of Brazil was $3\frac{1}{2}$ million sacks¹ ; from 1900 to 1905 the average was $12\frac{1}{2}$ millions. Yet during these twenty years coffee had almost entirely disappeared from the State of Bahia ; the oldest productive districts of the States of Rio and of Minas, and even the ancient plantations of the valley of the Parahyba in San Paolo itself, had suffered considerable loss and were already passing through a crisis. But on the still newly cultivated portions of the soil of San Paolo the planting fever had reigned supreme, particularly between 1887 and 1900.

¹ It was between 1880 and 1890 that the production of Brazilian coffee began regularly to exceed the production of all the rest of the world.

Years.			Production of Coffee in Brazil in sacks of 132 lbs. (60 kilos).	Production of Coffee in the whole World in sacks of 132 lbs.
1870-1871	...	...	3,763,908	7,211,000
1875-1876	...	...	3,406,203	7,599,000
1880-1881	...	...	3,659,483	9,829,000
1885-1886	...	...	5,586,000	9,565,000
1890-1891	...	...	5,547,000	9,366,000
1891-1892	...	...	7,596,000	11,811,000
1892-1893	...	...	6,541,000	11,331,000
1893-1894	...	...	4,840,000	9,277,000
1894-1895	...	...	6,977,000	11,551,000
1895-1896	...	...	5,969,000	10,280,000
1896-1897	...	...	8,500,000	12,767,000
1897-1898	...	...	7,250,000	11,796,000
1898-1899	...	...	9,445,117	13,850,000
1899-1900	...	...	9,561,445	13,941,000
1900-1901	...	...	11,373,371	15,158,000
1901-1902	...	...	16,270,678	19,915,000
1902-1903	...	...	12,903,504	16,745,000
1903-1904	...	...	11,193,505	17,193,000
1904-1905	...	...	10,597,080	15,507,000
1905-1906	...	...	11,055,378	16,306,000
1906-1907	...	...	20,409,180	—

The general fever of further plantation arose from many and very different causes. In the first place, Brazil had been going through a period of low exchange. Paper money fell below par. The fall began in 1891, and increased in rapidity until 1898, when it was checked by the Funding Loan. At its lowest, paper was worth only one-fifth of its nominal value in gold (5½d.). The exaggerated issue of paper money which provoked the collapse of exchange suddenly endowed Brazil with an abundant circulation of currency. All this capital (for although it was paper the purchasing or actual value of paper was not affected in the interior) was a powerful factor in the development of Brazilian production; it was waiting to be employed, to lend itself to all forms of national activity; new undertakings sprang up on every hand. The lowering of the rate of exchange resulted in

a system of general and intensive protection, by which agriculture was favoured quite as much as industry, and especially the cultivation of coffee, which demands a large capital.

In 1899 the President of the Republic said in his message : " The excess of paper money has produced the illusion of a great abundance of capital, and has resulted in the creation of a number of industries which it has been necessary to protect by an ultra-protective tariff." This observation applies to a certain extent to the coffee industry, and may serve as a commentary upon the history of valorisation. We shall have occasion presently to consider how far the question of exchange came to be involved in the question of valorisation.

The establishment or even the purchase of a coffee plantation had become towards 1890 an extremely good speculation. The market price of coffee was good, and the yield of the soil fabulous. San Paolo still remembers those times when every *fazendeiro* was a nabob, and every one wished to be a *fazendeiro*. It is therefore easy to understand why the Paulistas wanted to extend their plantations.

But we must first explain at somewhat greater length how such an extension was possible. In Europe, where all the cultivated soil is already occupied, it is very rare to witness the sudden extension of any particular crop ; for it can only spread at the expense of other crops, and this fact alone forms a powerful restraint, a kind of guarantee against crises of over-production. In America such conditions do not obtain, or did not ; the soil is free, and lends itself to a hasty conquest.

It is enough merely to find labourers. Any fresh extension of agriculture demands more workers. Any culture will progress in proportion to the abundance of labour. The lack of labour ought to regulate the develop-

ment of plantations, and enforce moderation in that development, so that it is easy to perceive the moment when production is sufficient, and when further expansion ceases to be profitable. This species of natural control was unhappily absent in San Paolo. If the supply of labour had been left to spontaneous immigration, the expansion of the coffee plantations would have been less hasty. There would undoubtedly have been a movement of immigration, but it would have been less intense. It would then have been necessary to attract workers from Europe by the promise of high wages. The cost of production would have been modified and the plantations would have expanded more slowly. But as it was, the Federal Government firstly, and then the State Government, adopted the policy of immigration at the popular expense, and began to recruit, in Europe, armies of agricultural labourers, who were placed at the disposal of the *fazendeiros*.

We have described in a preceding chapter the untiring activity with which the Government supplied the demand for labour. Perhaps the abolition of slavery, by causing something of a crisis, contributed in persuading the authorities to adopt an organised system of free immigration. But the *fazendeiros* were not contented with replacing the slaves; in 1887 there were only 107,000 in the State; but 900,000 immigrants, their passages paid by the Government, arrived in the next three years. It seems to me that the immigration policy was one of the most indubitable causes of the present crisis, and consequently one of the principal factors of the policy of valorisation.

This, I think, is the more incontestable in that these labourers were the first to take a hand in the extension of the plantations. Their wages on the *fazendas* consisted in a fixed sum of money and the product of certain

cereal crops which they were allowed to grow between the rows of coffee-trees or on separate allotments. Not only did the colonist live on the crops which furnished his table, but the very expansion of San Paolo offered him an excellent market for all he was able to produce over and above what he himself consumed ; so that his principal anxiety was to obtain an abundant harvest of maize and haricots. For this he required fresh soil, not already exhausted by unbroken years of cultivation, which would render him a larger crop from his seed ; he preferred new plantations, where his annual crops would suffer less from the demands of the coffee. Thus from the very beginning the colonists showed a marked preference for new plantations. Every *fazendeiro* was led to plant, were it only to satisfy his colonists. The competition between labourers anxious to establish new plantations became so keen that the market value of such work decreased considerably. Planting finally became a gratuitous operation as far as the *fazendeiros* were concerned. About 1870 the colonist was given a piece of soil to clear. Four years later he restored it to the owner covered with coffee-trees of productive age, for which he was paid about 10½d. per stem. Thirty years later he received only 5¼d., or even 2¾d. Finally came the system of leaving the land for five years in the hands of the colonist, who then returned it to the *fazendeiro* without receiving any payment for the coffee-shrubs planted, his only remuneration being the five years' crops which he was enabled to raise. At the moment when further plantation was prohibited many planters felt obliged to go on planting lest they should lose their colonists, who would have sought in the neighbouring *fazendas* the conditions they preferred.

Thus the *fazendeiros* increased the number of their trees beyond all bounds of economic sanity, a kind of

necessity pushing them on to aggravate the crisis. In 1902, when the first fall of the market was already a five or six years' tale, San Paolo counted 530 millions of coffee-trees more than four years of age, and 135 millions, or more than a fifth of the whole, less than four years of age—that is, planted since 1889. The laws on the introduction of immigrants had had this unforeseen consequence ; and if the action of the Government was thus partly responsible for the origin of the crisis, was there not an obligation on the part of the authorities to act a second time in such a way as to end the crisis ?

To explain the intervention of the San Paolo Government in the coffee market, we must remember the exceptional importance of the production of coffee in this State. Formerly San Paolo produced other things as well as coffee : sugar-cane, cotton, &c. ; but everything has given way before thirty years of coffee. To-day we may estimate the value of the coffee plantations at 90 per cent. of the general wealth. Coffee supports every one. Even the industries established in the country, even the other crops, exist and prosper only on account of the outlet offered them by the country districts which live by coffee, and the towns which live by the coffee trade. If coffee falls there is not a class in the nation unaffected ; the whole nation suffers ; the resources of the State dry up ; it becomes impossible to meet the expenses of the budget. The export duty, in fact, provides two-thirds of the total revenue of the budget ; and this duty is proportioned to the price of coffee. It follows the variations of the market, so that the coffee crisis has resulted in a sudden reduction of the revenues of the State ; it constitutes a public danger as well as being disastrous to individuals.

More, it compromises the equilibrium of all Brazil. A country like Brazil, where there are as yet so few accu-

mulated savings, cannot dispense with the annual entrance of a larger sum of gold than that which leaves it. This condition is necessary to the regular payment of the service of foreign obligations, if the credit of the country is to be maintained, and if its fiduciary circulation is not to lose value. The gold imported represents the price of national products sold abroad. Now coffee alone forms the largest proportion of the entire exportation of Brazil, and it is the gold produced by coffee which allows the country to purchase abroad all that national industry is still incapable of producing. Suppress the exportation of coffee, and the very existence of Brazil is threatened. The coffee crisis is not a crisis particular to the coffee States; it involves the future of the whole Union, and it is easy to understand how the Federal authorities have been led to intervene in the matter of valorisation.

From 1885 or thereabouts to 1896 coffee was sold at satisfactory prices. This was the golden age for the planters. The average price was about £2 16s. per cwt., sometimes rising to £4 16s. or £5 4s. The harvest for 1897 was very abundant, and the world's stock rose suddenly to five or six million sacks. There was then a notable fall in prices, which lasted until 1899, when they rose again. But this first period of depression did the planters little harm. The years 1897 to 1899 were those in which exchange was lowest; so that it happened that although the price of coffee had greatly fallen when expressed in gold it had, on the contrary, remained firm as expressed in paper. This being the case, the planters did not feel the effects of the fall until the lapse of several years; namely, until 1901, when the total yield of the world attained to 20,000,000 sacks, and the accumulated stocks of the world reached the enormous figure of 11½ million sacks. The price had fallen to 24s.

the sack of 50 kilos (110 lbs). But the stocks were hardly touched ; in 1905 there was still a reserve of eleven million sacks, or seven-tenths of the world's consumption.

Under these conditions the news which began to arrive in October, 1905, when the coffee was in flower, promising an unprecedented harvest for 1906, and which was confirmed from day to day by the fact that the frosts were holding off and the weather was favourable, re-awakened the anxieties which the higher prices of 1905 had quieted for the time. People began in desperation to calculate how far the world's produce might increase during the coming years ; how much might be absorbed by the consumers ; how long it would take to reduce the stocks which the harvest of 1906 would cause to accumulate. But in these calculations, which were similar to those which had been made at the time of the harvest of 1901, there was happily a new factor, which was in favour of the planters. Since 1903 the Government of San Paolo had prohibited new plantations. This measure was an extremely wise one. It could not, however, take effect for a considerable time ; for the coffee-tree only begins to produce at the end of four or sometimes six years. The trees planted in 1902 did not yield a berry before 1906, which explains the fact that the harvest of 1906 was so much greater than that of 1902, in spite of the fact that further plantation was prohibited. Only after 1906 could the effects of this prohibition appear.

The law of restriction was a palliative ; it prevented a further aggravation of the crisis ; it was far from providing an immediate solution, and more radical measures had to be considered. It is of interest to consider some of the measures which were then proposed, but not applied, as we shall the better comprehend the atmosphere in which the idea of valorisation had its birth,

THE VALORISATION OF COFFEE 245

and the manner in which the policy was gradually elaborated.

It seems that the first germs of the idea were conceived elsewhere than in San Paolo. In 1902, when it was first perceived that the collapse produced by the great harvest of 1901 would not be merely ephemeral, the President of the State of Rio proposed to the Governments of San Paolo, Minas, and Espiritu Santo an agreement designed to raise the price of coffee. The plan was as follows. The four States would agree to fix a minimum price for coffee, in terms of gold. In order to maintain this price they would recover from the exporters a duty equal to the difference between this fixed price and the lowest price quoted on the market. As a result, no merchant would gain anything by exporting coffee at a price below this fixed price, since he would only have to pay a heavier tax if he lowered his prices. This very simple arrangement ensured that the price of coffee would never sink below the agreed limit. The danger of this system was as follows : the merchants, unable to sell coffee at the prices established by the States, would of necessity cease to buy it, and the planters would fall from the frying-pan into the fire, since instead of selling their coffee at a low price, as formerly, they would not be able to sell it at all. To avoid this result, and to enable the planters to wait until the market prices had attained the authorised level, and thereupon sell their crops, the Government of the Union would agree to lend every producer 20 milreis per sack on the coffee delivered at its warehouses (exchange being counted as 2 francs, or 1s. 7½d.). An issue of 60 millions of milreis would furnish the Government with the necessary funds.

This proposal was never put into practice. It was discussed and opposed ; opposed particularly, and in a very competent fashion, by the National Agricultural

Society of Rio. This society affirmed in the first place that the proposed resources would be absolutely insufficient; an issue not of 60 but at least 180 millions would be required. Could such a measure be risked at the very moment when the country was reaping the first-fruits of the efforts which had been accomplished with a view to reducing the circulation of paper money? But the Agricultural Society put forward a still more serious objection. It showed that the State, by offering the planters a subsidy for every sack of coffee placed in its hands, would produce a flow of coffee into the national depôts; that the State would thus establish, for its own benefit, a sort of monopoly of coffee. Having rendered the sale and purchase of coffee impossible between private individuals it would have to turn merchant itself. Could it do so to the general advantage? "In principle," said the society, "we believe in the free exercise of social functions, for which competition is the best of tonics." This was the profession of faith of the liberal thinkers of the Agricultural Society; it saw salvation in organised production, and in the development of agricultural syndicates. It remained faithful to its ideas, and many of its members were later on, by reason of the scruples with which their liberal tendencies inspired them, very slow to avail themselves of the new policy of valorisation undertaken by the State of San Paolo. It is very remarkable to see that in Brazil, where public opinion is frankly in favour of State intervention and protection, the liberal doctrine is by no means without supporters.

But it was especially in San Paolo—the question being in that State a vital one—that the thinkers were absorbed in seeking some solution of the problem offered by the coffee crisis; and between 1901 and 1906 such a host of articles and pamphlets and books on the subject were

published that it would be hopeless to attempt to study them all; it will be enough to indicate some of the tendencies which they represent. Some concluded that as production exceeded consumption it was essential to bring about an increased consumption. To this end they counselled a series of measures which they called "the propaganda."

Reductions of the duty on coffee must be obtained from France and Italy, and means must be taken to stop the adulterations and imitations of coffee; Europe must be taught what real coffee is. (One may imagine how chicory is hated in San Paolo.) Even in England and the extreme Orient an effort must be made to triumph over tea, the great rival of coffee. We have seen a similar system develop in France in the time of the wine crisis, and heard proposals to extend, at all costs, an insufficient consumption which did not really bring about the crisis. Unfortunately, nothing could be less practicable. Statistics prove that the world's consumption of coffee increases each year by an almost invariable quantity, amounting to about half a million sacks, and all the efforts imaginable would not sensibly affect the rapidity of this progress.

Others had no idea of increasing the consumption, but sought, on the contrary, to regulate production; they wished, for example, to limit the number of sacks which each *fazenda* might export. Or they even proposed to burn the excess of the harvest; a very great sacrifice, considering the expenses represented by a sack of coffee ready for shipment.

Finally, a third group considered that the true cause of the crisis was a defective commercial organisation; instead of delivering their crops to the exporters, who realised enormous profits at their expense, the planters should have formed syndicates for the sale of coffee in

Europe and America, and exported their coffee themselves.

All were agreed upon one point only : that the prices then ruling in the Santos market, so far from ensuring a fair remuneration, did not enable the *fazendeiro* even to make a living after paying all the expenses of labour, mechanical equipment, and transport ; expenses which could not be reduced. Such was the common point of departure of all the arguments put forward, which combined in all imaginable ways, some of which were simply fantastic, the figures which represented the annual production and consumption, and also the monstrous commercial stock, the terror of the Paulista people. Another point in which all economists were agreed was that the Government ought to take action ; that it must not wait until the country was plunged in misery and universal poverty, until natural selection had done its work, and the crisis had swept away the weaker planters, and had left only the strongest on their feet.

The Government of San Paolo did not seek to evade the problem. Gradually the idea grew in the minds of a few statesmen of the form their action must take : the State would undertake to buy the surplus crop, in order to keep it out of the market for as long as might be necessary ; the reduction of the stocks would necessarily being about a rise of prices.

This new plan was founded upon the following train of reason : in the first place, it is not correct that the world's production is too great, if one considers an average year ; but production is irregular, and an abundant crop is enough to encumber the market, which encumbrance the deficiencies of the next few years will under normal conditions unload. As a matter of experience, it is almost a law that the more unusually large an abnormal crop is the smaller will be the crop

that follows. Sometimes the exhaustion of the coffee-trees will make itself felt for two or three years. It should be enough, therefore, to put aside the surplus of the fat years, and to place it on the market when the lean years come. This operation should save the planters ; one might even hope that the task would not be very onerous for the parties undertaking it, since they also would profit by high prices.

Secondly, this sequestration, so to speak, of the surplus of a large crop, must of necessity be effected by the Government. It could not be done by private initiative. One could not hope that each *fazendeiro* would keep a portion of his crop in his warehouses. The planters, indeed, are in a difficult position ; they live upon credit until the crop is ripe, and they must sell it the moment it is gathered in order to pay their debts. Every *fazendeiro* borrows from a commercial agent, who serves as intermediary between the producer and the exporter, and who is known as the commissionaire ; a superfluous member of the commercial machine, were it not for the only reason for his existence—the 'planter's lack of capital. The commissionaire is, before all else, a banker. It hardly ever happens that the *fazendeiro* possesses sufficient money to work his plantation without recourse to some second person.

The date of the harvest is also the date on which the commissionaire's paper falls due ; so that in the case of almost every *fazendeiro* sale is an unavoidable necessity. In a few weeks coffee is flowing into Santos like an irresistible tide ; the offer, the supply, has no relation to the demand ; the planter can take no account of the state of the market. Is it not therefore indispensable that the public authority should remedy this evil, and should seek to intervene in the coffee trade as a regulating influence ?

Such was the chain of thought ; but one serious danger remained. The intervention of the Government would have the effect of raising prices. Now these higher prices would profit not only the Brazilian producers, but also all their competitors in all the coffee-growing countries of the world. Outside San Paolo the enhanced price would mean an absolutely gratuitous profit, since the State of San Paolo alone would be responsible for the risks and expenses of valorisation. Would not the system of valorisation end in profiting the planters of Guatemala or Costa Rica to the detriment of those of San Paolo ? The proof that this anxiety was keenly felt in San Paolo is the fact that the Government, in 1904, commissioned Senhor Augusto Ramos to make a voyage of inquiry ; he was dispatched to the various coffee-producing countries of Spanish America, in order to study the situation of the planters there. His report was published in the *Relatorio* of the Secretariat of Agriculture in 1906. He found that the planters were everywhere as seriously affected by the low prices as in San Paolo ; that from the physical point of view all the advantage was with San Paolo, where the berry ripened with greater simultaneousness and the harvest was less impeded by the rains ; that labour was everywhere more scarce than in San Paolo, and of an inferior quality ; and that the organisation of the estates and their equipment was nowhere as perfect as that of the *fazendas* of San Paolo. He concluded that whatever the price of coffee San Paolo would retain a constant advantage over its less favoured competitors, whom it would gradually eliminate, as it had already begun to do, and that it had not anything to gain by maintaining the price of coffee below £3 4s. It would be difficult to exaggerate the importance of Senhor Ramos' voyage. It persuaded the Government of San Paolo that its

proposal was possible, and finally settled the question of valorisation.

The decision taken, nothing remained but to put it into execution, and, for that purpose, to find the indispensable funds. The sum necessary was estimated at £15,000,000. A German bank made an offer, declaring itself ready to cover the loan on condition that San Paolo should induce the Union to guarantee the transaction. The bank insisted that the credit of both the State of San Paolo and the Federal Government must be pledged as security for its advances. These preliminary negotiations took place at the end of 1905.

Then followed a period of negotiations with the Federal authorities with the object of obtaining their support. These negotiations were secret, so that we can know nothing of their details. The President of the Republic at the time was Senhor Rodriguez Alves; but Senhor Penna had already been designated his successor, and Senhor Alves referred to him a decision of which the effects would affect the future presidency. Nothing justifies us in believing that the proposal was then opposed either by Senhor Alves or by Senhor Penna. A Federal law of December 30, 1905, authorised the President of the Republic to enter into an agreement with the State of San Paolo, the object of the agreement being to regulate the coffee trade. Already, in San Paolo, people felt assured of success. No one doubted that the Union would agree to give the security demanded by the bankers, and already the time for active measures was apparently close at hand. The President of San Paolo convoked at Taubaté a meeting of the Presidents of the other great coffee States—Minas and Rio. From this interview resulted, on the 25th of February, the publication of the celebrated Act which determined the conditions under which valorisation was

about to be attempted ; a measure which is known as the Convention of Taubaté.

I cite the essential articles :—

Article 6.—The States undertake to establish a supertax of 3 francs (2s. 4½d.) per sack of coffee exported from each of these States, and also to maintain the laws which prohibit . . . the increase of the areas planted with coffee, during a term of two years, at the end of which the Convention may be prolonged. . . .

Article 7.—The product of the supertax paid upon exportation will be collected by the Union, and employed in the payment of the interest and amortisation of the capital necessary to the operations.

Article 8.—To put this convention into execution the State of San Paulo is from this present authorised to undertake, at home or abroad, on the guarantee of the supertax of 3 francs and the common responsibility of the three States, the necessary operations of credit to the extent of £15,000,000. In the event of the endorsement or guarantee of the Union being necessary to these operations of credit, the dispositions of the Federal law of the 30th of December, 1905, will be observed (the law which authorised the Union to grant this guarantee).

Such was the form of the convention of Taubaté. The Rio *Fornal de Commercio*, irreconcilably opposed to valorisation, criticised it severely. The Coffee States—it said—appear to demand this Federal guarantee, which the Union was nevertheless free, according to the law of December 30, 1905, to give or to withhold. But what especially provoked the anger of the *Fornal* was the fact that the Convention had bound up with the solution of the coffee crisis another measure of a very different kind : none other than the creation of a “Caisse de Conversion.”

THE VALORISATION OF COFFEE 253

Article 8 of the Convention, indeed, having settled upon the sum of £15,000,000 as that to be raised by the loan, had added: "The product of this loan shall be employed as ballast for the Caisse of Issue and Conversion, which will be created by the National Congress for the fixation of the value of the currency. The product of issues upon this basis will be employed for the valorisation of coffee."

We have elsewhere considered the mechanism of the Caisse de Conversion. It is certain that the very manner in which the Convention had proposed to establish the Caisse lent itself to the attacks of the critics; and the *Jornal* had no wish to control them. "Had the Convention forgotten the principles of the Brazilian Constitution? Was it not aware that only the Federal powers could legislate in money matters? And how dared three States entitle a treaty agreed upon between them 'a Convention between the States of Minas, Rio, and San Paolo for the valorisation of coffee,' and thereby create a Caisse de Conversion to fix the value of the currency?"

In defending itself against this accusation of unconstitutional action, which, in a country such as Brazil, would inevitably afford matter for criticism, the State of San Paolo proved that it was not without excuse. The representatives of San Paolo at Taubaté, full of anxiety to see something definite come of their scheme of valorisation, would have been far too prudent to embarrass themselves with the weighty programme of the Caisse de Conversion, had they supposed that this portion of their proposals would have encountered any serious opposition from the Federal authorities. On the contrary, the idea of the Caisse de Conversion was for them only a means of obtaining the indispensable support of Senhor Penna. It was Senhor Penna who was, at Taubaté, the most

active defender of the Caisse de Conversion, and the most eager to add this supplementary clause to the original valorisation clauses. He supported valorisation less out of interest in the coffee question than because he saw an opportunity for creating the Caisse; and he regarded the Caisse as the essential machinery for the financial reorganisation of Brazil. The agreement was ratified on these foundations: San Paolo would gain the double advantage of realising a proposal which was dear to it, and of obtaining from Senhor Penna his indispensable support. This is the explanation of the audacious experiment in legislation upon financial questions which the *Jornal do Commercio* reproached the Convention for attempting.

The President of San Paolo, Senhor Tibiriça, hoped to obtain for the Convention the sanction of the Federal authorities. On the 2nd of March he addressed to the President of the Republic a letter in which he requested that the Federal Congress should assemble in extraordinary session, in order to vote the urgent measures which were necessary to the realisation of the Taubaté scheme of the Caisse de Conversion and the valorisation of coffee.

Senhor Rodriguez Alves replied on the 12th of March that in deciding, by Article 8, that the State of San Paolo should transact operations of credit to the extent of raising a capital sum of £15,000,000, which was to serve as the basis of a Caisse de Conversion which would be created by the National Congress in order to fix the value of the currency . . . the Convention had forgotten its provincial character, and must be submitted to the approval of the National Congress; that as far as the programme concerning the propaganda in the interests of coffee and the development of its consumption was concerned, &c., a certain number of ideas might be

immediately applied ; and finally, that the National Congress would not be convened in extraordinary session. This letter created in San Paolo a profound feeling of disillusion.

It would seem that from this moment Senhor Alves had gone over to the section of opinion which was hostile to valorisation ; and valorisation had some powerful opponents. They were supported not only by the *Jornal do Commercio*, but also by the immense authority of Lord Rothschild, who severely censured the Paulista schemes ; either because he regarded valorisation as a dangerous experiment, or because he was hostile to the Caisse de Conversion in particular. Whatever the truth may be, the supporters of the Convention had a strong opposition to overcome.

In San Paolo the news of the Convention had been welcomed with enthusiasm. In the States of Rio and Minas opinion was less unanimous ; in the city of Rio itself there was a general uneasiness. Men spoke of the credit of Brazil, patiently built up by the labours of five years, and imprudently endangered ; they anxiously reckoned the number of sacks which must be bought in order to produce a sensibly higher price. The world's stock of coffee, before the harvest of 1906, amounted, in June, to nearly twelve million sacks. The production of the other coffee-producing countries would amount to some four million sacks. These sixteen million sacks would suffice for a whole year's consumption. Would it therefore be necessary to buy the entire crop of San Paolo, Minas, and Rio ? And besides these serious objections there were others ; more hostile but often less sensible. The planters were assured that all they would gain from the valorisation scheme would be an extra duty of 3 francs per sack ; examples of analogous operations were discussed, and proofs abounded that

the San Paolo experiment would be still more dangerous than any of these. I myself was in Rio in August, 1907, when the critical period was already a matter of the past ; but I still found abundant traces of hostile public opinion.

At the beginning of June, 1906, the abundant harvest was about to commence. The President of San Paolo, understanding that the scheme of the Convention had no chance of being realised as it then was, introduced some important modifications : " If the operations of credit," said the revised text, " are realised by the three States without the endorsement or guarantee of the Union, the supertax of 3 francs per sack will be collected by the States. If the Caisse de Conversion be not created, the States will be able to apply the product of the loans directly to the valorisation of coffee." Moreover, the pretensions of the scheme became less and less ambitious. In February it had been decided that a minimum price of 55 to 60 francs per sack must be maintained (£2 4s. to £2 8s.). In June the prices mentioned were only 50 to 55 francs (£2 to £2 4s.).

The National Congress finally approved the Convention, with the exception of all that concerned the Caisse de Conversion ; that is, the loan, the very means of action. San Paolo was forced to abandon the hope, so long conceived, of obtaining the endorsement of the Union. This, it will be remembered, was the condition of the loan imposed by the bank with which San Paolo had been negotiating. Doubtless alarmed by the spirited campaign which had been directed against the scheme of valorisation, this bank withdrew its offer.

Such, towards the month of October, 1906, was the position of the State of San Paolo. It had no funds with which to set to work. The Convention of Taubaté and its subsequent modifications were apparently to remain

in the region of academic declarations. And yet, at the very moment when all further action seemed impossible, intervention had become more essential than ever. The Convention had filled the planters with hope, and each one, to the utmost of his ability, had kept back the coffee which now he was forced to throw upon the market. And still, from all sides, came precise information as to the unheard-of abundance of the crop then being handled; it surpassed all forecasts, was without all precedent. Never can the news of a splendid harvest have sown terror as did this; the railways feeding Santos were already becoming congested. The market price, which in February, the period of the Convention was still 36 francs per 60 kilos (£1 8s. 9d.) for coffee of type 7, was rapidly falling. It seemed that immediate ruin was at hand.¹

Under these circumstances the Government of San Paolo exhibited great decision. It undertook to accomplish alone the task whose responsibility it had failed to persuade the Union to share. As it has been executed, the valorisation of coffee only distantly recalls the scheme drawn up at Taubaté. We must never forget that it has only been an expedient. The end only has remained the same; the means have changed. It was in the limitation of these means that the greatest danger resided. The adventure must be followed to the end under penalty of proving fatal.

To make its purchases of coffee San Paolo obtained from the house of Schroeder, in London, and the City Bank of New York, a loan of £3,000,000. Thus San Paolo had at its disposal, not the £15,000,000 foreseen by the Convention, but the fifth of that sum. To make larger purchases possible, the following procedure was

¹ The above prices per lb. are equivalent to 4'36d. per lb. at 60 frs., 3'63d. per lb. at 50 frs., and 2'62d. per lb. at 36 frs. per bag.

resorted to. The State made arrangements with merchants on the foreign markets, who advanced it up to 80 per cent. of the price of the coffee bought, on condition that the coffee was deposited in their warehouses. The coffee was thus pledged for four-fifths of its value. San Paolo paid for each sack one-fifth of its price; the remainder was paid in its name by the third parties who had kept the coffee between their hands, as a pledge of the State's debt towards them. As for the foreign loan of £3,000,000, it was guaranteed by the supertax of 3 francs per sack collected on exportation. In December, 1906, in fact, San Paolo organised the collection of the supertax at Santos, and in January, 1907, succeeded in obtaining its payment in the port of Rio also, on the coffees coming from Minas or the State of Rio.

The purchases of coffee were at first effected in moderation. At the end of 1906 the State still possessed only 2,500,000 sacks. But as it became clear how greatly the harvest of 1906 had exceeded all expectations, the State resigned itself to continuing its operations, and finally acquired the enormous stock of eight million sacks. The firm of Theodore Wille was entrusted with these purchases. It continued to make them, not without difficulty. The Government did not wish to buy inferior coffees at any price; neither did the merchants who received the coffee in pledge of their advances, as it would have been extremely difficult to place such coffee on the market afterwards. Also the commission under which the purchases were made eliminated inferior types, and on January 2, 1907, the firm of Wille declared publicly that it was authorised to buy, daily, 15,000 sacks of coffee of type 7; that is, of a quality superior to the average.

This measure set all the *fazendeiros* who possessed inferior coffees against the process of valorisation. The agitation was resumed. It was stated that San Paolo had

deliberately favoured the Paulistas, whose coffees are, as a general thing, of a superior type, at the expense of the planters of Minas and Rio, who more often obtain an inferior product ; and it was claimed that the coffees of Minas and Rio, which were insufficiently protected, should be relieved of the supertax of 3 francs which they as well as the San Paolo coffees were paying. Negotiations were reopened between San Paolo and the Federal Government, Senhor Penna having inaugurated his Presidency in November, 1906. It was decided that the Bank of Brazil should lend six million milreis (about £375,000) to San Paolo, for the purchase of inferior coffees of types 8 and 9. This gave satisfaction to the non-Paulista planters ; it was also the first sign that the new President was in favour of valorisation.

The President did not stop there. From that moment the Union endeavoured, by means of its credit, to obtain the funds required by San Paolo for the complete realisation of its scheme of valorisation. It opened negotiations with Lord Rothschild which had an unfortunate ending ; for it was then, in response to the steps taken to obtain from him a loan of £5,000,000 in order to complete the valorisation scheme, that he published the famous letter which all Brazil read with a kind of terror, in which he declared that he could not compromise his firm in such an adventure.

The period of valorisation as to which we have least information is that between the February and June of 1907, when the President of San Paolo officially declared that the purchases were terminated. During this period the purchases ceased, but at what date it is impossible to say. It is obvious that as the official purchases contributed to stiffen the market the news of their interruption would result in a new depression, so that the Government of San Paolo, employing all its efforts to struggle against

a falling market, would have no object in immediately declaring that it had retired from the contest. It was obliged to stop its purchases prematurely ; that is, before it had succeeded in preventing the fall of prices. The depression lasted, as a matter of fact, during the first six months of 1907 ; which fact gives the measure of the irreparable disaster which would have occurred, if the State of San Paolo had not appeared on the market as the most desperate of buyers. San Paolo was checked by the lack of resources ; the victim of the task in which it had been forced, unsupported, to attempt the process of valorisation. It did everything possible to prevent the fall ; even to taking the most exceptional measures, when, after the official funds had been exhausted by purchase, coffee still continued to flow into Santos. It is said that there was a moment when the railway companies, acting upon instructions coming from the highest quarters, suspended, or at least delayed, the transport of coffee from the interior towards the coast.

In June, 1907, the State of San Paolo found itself the owner of some eight millions of sacks of 60 kilos (nearly half a million tons). These coffees, bought at the current prices, cost the State an average of 42 fr. 50 per 50 kilos—that is, a total of more than £16,000,000. Of this sum the loans contracted from foreign banks and the National Bank had enabled the State to pay about a quarter. The remainder had been furnished by the firms which had made the purchases on behalf of the State, whose advances were covered by the coffees warehoused in Havre, Antwerp, Hamburg, &c. Coffee bought at 42 fr. 50 the 50 kilos (about £1 14s. 6d. per cwt.) was only worth 36 fr. 50 at Havre (or £1 9s. 6d. per cwt.) ; that is, a settlement would have involved San Paolo in a dead loss of 5s. per sack. But it is easy to prove

that the losses would not have been limited to this amount, and that settlement was, properly speaking, impossible. For this price, 36 fr. 50, was only maintained precisely because the State's stock was withdrawn from the market. The State therefore found itself in a singular position: its coffees were only worth 36 fr. 50 so long as they were not offered for sale; consequently it was forced to reserve them, whether it wished to do so or otherwise.

But for this policy to be possible the State must be able to meet all the expenses represented by the interest on the loans contracted for the purpose of valorisation, the interest on the advances made by the firms which had effected the purchases, as well as the expenses of warehousing the coffee, &c.; in short, a sum which it is impossible to estimate precisely; but it has been estimated at 50 millions a year (£3,125,000): an enormous sum for a budget like that of San Paolo.

It was therefore a difficult matter to find resources which would enable the State to consolidate the process of valorisation. In the first place a gross sum of £2,000,000, to be employed in valorisation, was obtained from the capitalists to whom the State had rented the Sorocabana Railway.¹

The President of San Paolo also resumed his endeavours to obtain for the enterprise the patronage of the Union, and solicited from the latter a loan of £3,000,000. This was a return, in a small way, to the Taubaté scheme, according to which the Government was to have granted the signatory States the support of its credit in obtaining the loan of £15,000,000. At Senhor Tibiriça's request a final discussion of the question of valorisation was opened in Rio; the cause was eagerly pleaded; it

¹ The exploitation of this railway, bought in by the State a few years before, was conceded to a Franco-American syndicate.

was maintained that the risk to the Union would be slight, since only a fifth of the original loan was required; and it was further emphatically declared that without reference to the disinterested protection—were it extended even at a loss—which the State of San Paolo owed to its planters, and the Union to San Paolo, one must remember that the affair would perhaps be no bad speculation in itself. Moreover, the news of the crop of 1907 was arriving; it was plainly deficient, and the opinion was gradually formed that in San Paolo at least it would hardly exceed a third of the preceding crop, or five million sacks. Just as in 1906 the reports of the general abundance of the harvest were received with absolute terror, this year all the signs of the exhaustion of the trees were looked for with a rising hope.¹ The predictions of the economists, who had asserted that the effects of a good year would be compensated by those of a bad year, and that in order to save the planters it was enough to warehouse the surplus of the abundant crop and sell it in a deficient season, were apparently about to be realised.

It was this deficient harvest that re-established confidence; that arrested the fall of the market, obtained from the Federal Congress the vote for the loan in favour of San Paolo, and also, no doubt, persuaded Lord Rothschild to lend a friendly ear, and to undertake to place the Federal loan which was to ensure the settlement of the operation of valorisation.

The harvest of 1907, which was sensibly inferior to the world's consumption, permitted a slight reduction

¹ If the planters really expected relief from a poor crop it is hard to see why, in 1906, they did not allow a certain proportion of the berries to fall from the trees, thus keeping up prices and economising labour. That they did not seems to justify the tradition of Brazilian extravagance.—[TRANS.]

of the stocks of coffee. In the May and June of 1908, before the first consignments of that year's crop had arrived in Santos, the expected rise occurred at last, and the price reached 45 francs (£1 16s.). There was even on certain markets an absolute lack of coffees of superior quality, of which the Government of San Paolo was reserving the entire stock. Prices appeared to be so firm that those in charge of the valorisation scheme were able to sell at a satisfactory figure some hundreds of thousands of sacks, which to that extent lightened the burden of the State of San Paolo. But speculators hesitated to act, uncertain of the decisions which San Paolo might form. Prices accordingly fell to 40 francs, and all official sales were suspended while the State awaited the results of the crop of 1908. This crop was on the market during the last few months of the year, and could not be estimated precisely before the beginning of 1909. Brazil hoped that it would again be deficient, and would facilitate the liquidation of the stock locked up in the reserves of the State. It had been estimated in advance as eight million sacks, for the State of San Paolo only. But so many people would gain by a poor crop that this estimate was very likely to be exceeded by the facts.¹

However this may be, the anxiety felt in Europe on the subject of valorisation has perhaps been exaggerated. San Paolo has at present sufficient resources at its disposal to enable it to postpone the sale or liquidation of its stock, and need only sell at its convenience. If it is as yet impossible to estimate the final results of valorisa-

¹ The *exportation* of coffee from San Paolo in 1908 amounted to 8,940,000 bags, valued at £17,207,000, as against 11,470,000 bags in 1907, and 10,166,000 in 1906. In 1905 the quantity exported was 7,450,000 bags; the excessive overproduction was limited to two seasons.—[TRANS.]

tion, and the burden it will impose on the finances of the State of San Paolo, it would in any case be illogical to judge the State of San Paolo as an ordinary merchant, and valorisation as an ordinary business operation. The statesmen who undertook it have pursued a single object : to safeguard the great coffee-planting industry. If they attain their object no sacrifice will have been too heavy.

The class of planters whom valorisation was designed to save from ruin have faithfully supported the Government of San Paolo. The harvest of 1906 had been so abundant that in spite of the low prices at which it was sold it left the *fazendeiros* a balance of profit. This balance represents what the *fazendeiros* owe to valorisation ; it permitted the normal outflow of the coffees harvested that year. The year 1907 was far more severe. Prices were slightly higher than in 1906 ; but each *fazendeiro* had gathered only a third of the sacks obtained from the crop of the previous year ; so that very few *fazendeiros* were able to cover their expenses. However, they had taken fresh heart. They paid without protest the supertax of 3 francs per sack. They had full confidence in the Government which had not feared boldly to pledge its credit in order to defend their interests. The election to the Presidency of Senhor Lins, the Minister of Finance, and the chief creator of the valorisation policy, was a clear indication of the tendencies of Paulista opinion.

What are we to expect from the harvests of the future ? Shall we find that the crop of 1906 will really have marked the apogee of Brazilian production ? If it continues to increase, valorisation will only have been a blow struck into the void.

In San Paolo the future has been safeguarded by renewing, for five years, the law which prohibits fresh plantations. Thus the number of coffee-trees cannot be increased ; moreover, all that have been planted in indif-

ferent soil, or which are insufficiently tended, will quickly age, and their yield will be reduced. But beyond the limits of San Paolo, in the States in which the limitation of plantations has not been decreed, the producers of coffee continue to plant. What is the extent of these new plantations? We find the reply to this question in a report presented to the Secretariat of Finance of the State of Minas Geraes by the engineer Carlos Prates, who was instructed to inspect the southern region of Minas, to which the coffee *fazendas* are confined. After a very precise calculation, municipality by municipality, of the area occupied by new plantations, he concludes that it is certainly no larger than that of the plantations abandoned. The number of plants under three years of age may be estimated as only one-tenth of the total number; and we see in these continual plantations not an extension of the coffee industry, but a consequence of a necessity to which the planters of Minas are subject, as they are forced, on account of the nature of the soil, and the indifferent quality of the negro labour which they employ, constantly to renew their trees.

Moreover, how can we admit that the plantations could continue to develop if the actual prices of coffee do truly make it impossible for the planter to make any profit? Yet such, in fact, is the postulate on which the fabric of valorisation is based.

It would be useless to discuss here the calculations which the Paulist economists have accumulated in order to prove that the expenses of culture surpass, or at any rate equal, the price resulting from the sale of coffee. The sincerity of these gentlemen is as incontestable as their profound experience of the subject.

One danger alone remains: it lies in the fact that they have not foreseen or allowed for a radical reform of the present organisation of the coffee-growing industry.

Their inquiries bear exclusively upon the present conditions of production by large estates. If small ownership should one day establish itself in San Paolo, would it not be able to diminish the expenses of producing coffee? The small owner has unknown resources in the shape of economy and savings; his power of resisting crises is an unknown quantity. Valorisation might not eventually serve the true interests of the State were it to end in retarding, or even in preventing, an economically profitable revolution of the agricultural organisation of San Paolo.

Such, in my opinion, is the most serious point on which we must reserve our judgment of valorisation. I have shown, in the preceding chapter, how closely the cultivation of coffee in San Paolo is bound up with the system of enormous estates.

The policy of free immigration assisted the great landowner in establishing his rule; and valorisation also was undertaken to succour the large proprietor. Protectionism always entails this danger: its supporters think it is protecting a nation, but in reality it only protects a class.

CHAPTER XI

THE COLONISATION OF PARANÁ

The formation of a rural democracy in the south of Brazil—Small holdings—The isolation of the colonies—History of the colonisation of Paran —The colonies around Curitiba—The colonisation of the west—A visit to the Polish colonies of Rio Claro—*Mat *—The San Paolo and Rio Grande Railway.

IN contrast to the Paulista aristocracy, European immigration has tended, in the southern States of Brazil—in Paran , Santa Catharina, and Rio Grande—to create a very different type of community : a rural democracy of small proprietors. A nation is in process of formation upon principles of absolute equality ; for as urban life and industry are as yet embryonic, the soil constitutes the only capital, and this capital is in the hands of those whose labour renders it productive.

Compared with San Paolo or Minas, or the old sugar countries of Campos and Pernambuco, Paran , Santa Catharina, and Rio Grande are new countries.

They had no long-established rural population to act as the ruling staff of an army of immigrants ; the soil was free to all who came. Often it was absolutely without an owner ; and, as no one possessed any rights in it, fell into the category of escheated land ; that is, Imperial territory, which after the Revolution became State territory. Even over private lands the rights of property were often uncertain and almost fictitious. The

proprietors did not exploit their domains ; sometimes they had not even visited them ; they vaguely knew what the boundaries were, but exercised no supervision over them.

There were no great agricultural estates ; hence no slaves. In San Paolo white labour was called in from the first to replace the labour of slaves ; and for a long time free labour and slave labour coexisted together. In the south the colonists knew nothing of slavery. The law of 1851, by which the Province of Rio Grande organised the colonisation of its territory, forbade slaves to enter the colonial districts. In 1881, at the moment when slavery was dying out in Brazil, while the recruiting of blacks became more and more difficult, and the scattered planters of San Paolo, rebelling against the principle of free labour, found no other resource but that of buying negroes in the north of the Empire, the principal Assembly of Paraná debated whether the importation of slaves into that province should be prohibited. Such precautions were superfluous. It was not by the force of laws or regulations that the early colonists of the southern provinces escaped the competition of slavery. Slavery could not find a root in soil where wholesale agriculture was unknown ; where indeed it is unknown to this day. At one time indeed, about the year 1895, in the days of the coffee boom, it did seem that the Paulista methods would cross the frontier and invade a portion of the State of Paraná, or at least the upper valley of the Paranapanema, bordering on San Paolo ; but the crisis arrested their progress, and the rule of the small proprietor in southern Brazil has remained unbroken.

In San Paolo the growth of produce for exportation had created the system of huge properties. But the colonists of southern Brazil, at all events in the begin-

ing, knew nothing of producing exports ; they produced food-crops almost exclusively. Fortunately for them the climate, with its moderate heat and its regular rains, allowed a laborious population to gain a living from the soil. But all produce was perforce consumed on the spot. Isolated in a land of forests, where communication was difficult and slow, lacking the means of transport, the colonists had to suffice to themselves ; their relations with the rest of the world were rare, and of economic movement there was none.

Nothing could be more striking than the history of these regions and that of the neighbouring plains of the Argentine. The harvests of the Argentine are sent as soon as reaped to Buenos Ayres or Rosario, whence they are shipped to German and English ports. The world's market readily absorbs these crops. Each immigrant boldly tills as much soil as he can reap. Each new railroad sows colonies on either hand. The trade in cereals creates and stimulates colonisation. Nothing of this kind is seen in Brazil. The existence of the colonists rather recalls the life which was led in the seventeenth century by the pioneers of New England ; but the pioneers of New England were sustained in their wretched economic existence by their ardent desire for religious liberty. In Brazil, on the other hand, colonisation was an official undertaking. The colonies were founded, one by one, by the determined will of the Brazilian Government.

Its work prospered slowly, amid innumerable difficulties. However hardy they may be, families of human beings cannot, in our present age, live without some resources in the shape of currency ; they must be able to buy what their fields cannot give—salt, petroleum, clothing. The colonists might seek to suffice to themselves in vain ; some market must be created for them,

however limited ; they must be enabled to sell some portion of their modest crops. In default of such resources they must lead a precarious existence, and make shift to last out until such time as official help can reach them. The task was certainly a difficult one. It is not enough to dump men down ; one must solve, a hundred times over, the problem of ensuring the consumption of their products. The task of evoking urban centres is incessantly involved with that of peopling the forests. So colonisation progresses step by step, and the country slowly becomes a more complex organism.

Towards the end of 1907 I passed some weeks in the colonies of Paraná. The colonisation of Paraná is a matter of recent growth ; the history of the colonies is brief, and easily retold.

In the middle of the nineteenth century, at the time when Paraná was detached from San Paolo, its population comprised in all some tens of thousands of inhabitants, grouped together in the neighbourhood of the coast, or scattered throughout the interior, over a territory whose area is more than half that of France. So far the colonial movement had not shaped ; only a French physician, endowed, it would seem, with a spirit of adventure in excess of his prudence, had established himself, with a few compatriots, in the heart of the forest, on the banks of the Ivahy River, in an inaccessible solitude. This settlement was the lost advance-guard of colonisation.

Towards 1855 appeared a spontaneous influx of German agriculturists, coming from the German colonies of Santa Catharina. They advanced gradually from the south towards the north. At the outset they invaded the valley of the Rio Negro, not far from their base ; but, growing bolder, they pushed on to the little town of

Curitiba, the capital of the young province, where they demanded land. They came from Doña Francisca and from Joinville ; that is, from the seaboard region of Santa Catharina, where the German population had rapidly multiplied.

This is the first time I have had occasion to speak of the extraordinary power of expansion possessed by these colonial populations. One encounters it upon every page of Brazilian history ; nor is it the privilege of the German race ; the Polish and Italian colonies have also accomplished similar rapid and astonishing conquests. The fertility of these colonist families is amazing ; and heredity seems to confirm those aptitudes which are indispensable to the rude life of a colonist. However, the German colonising movement ceased ; the Germans made money and abandoned agriculture. To-day Paraná counts a large German population, especially in Curitiba, but in all the other towns as well ; and all deriving from Santa Catharina. But this population lives by trade, and has left the tilling of the soil to others.

Just as the Germans who entered Paraná between 1850 and 1870 did not come directly from Germany, but from the State of Santa Catharina, so the French who took part in the colonisation of this State came not from France, but from Algeria. They have not played an important part in the history of Paraná, and I mention them only out of deference to my compatriots. They arrived in 1868 and 1869, to the number of a hundred, and settled in the neighbourhood of Curitiba, where they were given allotments. Apparently these Algerians gave much anxiety to the authorities ; they were discontented ; complaints abounded. Two in particular, Louis Huet and Edouard Imbert, were uncontrollable. The reports of the Presidents of the province gave their squabbles with the Government the importance of affairs of state.

The details of these reports are often amusing ; one recognises the character of the Gallic race ; in love with the law, and often with chicanery. Of a fertile juridic imagination, Huet, in order to obtain two allotments instead of one, insisted upon pretending that he had a separation order from his wife, or at least a separation of goods, and that his wife, in consequence, had a right to an allotment of her own.

These Algerians were the first to grow vines and make wine in Paraná ; but whether the soil was poor or the cultivators unskilful, the Algerian colony did not prosper. A few allotments are still in the hands of the descendants of the original settlers. When a French company undertook the construction of the first railway to enter Paraná, and began to organise its staff, the French inhabitants of the country flocked round the company as though they had found a powerful protector. One may still hear French spoken at more than one railway station ; but the French element has almost completely disappeared from the rural population.

Then followed colonists of all nationalities : some Americans from the States, some Basques, and a majority of Italians whom the State sought to settle in the sea-board plain, on the shores of the bay of Paranagua and at the foot of the Serra do Mar. The commercial centre of these new colonies was the little town of Morretes. I have elsewhere explained how the Serra do Mar separates two regions which are physically dissimilar, and unequally adapted to colonisation : the tropical plain between the *serra* and the sea, and the temperate table-land on its landward side. But in Paraná the colonisation of the foot of the *serra* has not completely broken down. It experienced great difficulties at the outset, and the population has not increased ; but one still encounters, around Morretes, Italian families who are occupied in cultivating

sugar-cane. This is, I think, one of the very few parts of the world where sugar-cane is cultivated by white people.

Despite the profits to be gained by the cultivation of sugar-cane, in 1880 a party of colonists from Morretes, greatly tried by the humid heat of the coast, left their holdings, and, without official support, went to settle upon land which they bought near Curitiba. After the habit of Italians, they engaged themselves as labourers on the railway being built between Paranagua and Curitiba. They were thus able to observe how far superior to their own condition was that of the colonists whom the Government had just established around the town, and wished to share in the advantages which were ensured by the neighbourhood of capital. One of the largest villages of the circle of colonies which to-day surround Curitiba is populated by Italians from Morretes. This is the parish of Santa Felicidade.

Curitiba was then quite a small town; its urban population cannot have exceeded 10,000 inhabitants. It was none the less by far the most important centre in Paraná, and the sole market; and for this reason acted upon colonisation as an attractive focus. But since the colony of Algerians near Curitiba had ended in a semi-failure, the Government had concentrated all its efforts upon the coastal region. The first to understand what advantage might be derived from Curitiba by colonising its surroundings, and to conceive the idea of a new colonial programme, was the President of the State, Lamenna Lins. His reports might serve as a commentary to the whole history of colonisation in southern Brazil. "It is necessary," he says, "that the colonies should rapidly reach the point of sufficing to themselves; that we should not be obliged to continue their subventions for ever. At Assungay the colonists live only by the works we are incessantly forced to undertake in

order to have some excuse for distributing wages among them, or rather alms. We must renounce these methods, and give the colonists a means of earning money; and to this end we must establish a market near them."

From 1876 to 1879 the colonisation movement around the town became more and more active. The Government, which owned no land in those parts, bought it from Brazilian owners. It then had the land surveyed, and measured out in lots of 30 acres. Sometimes it would build a little temporary house; or the colonist himself would do so. The families were lodged at Curitiba upon arrival; at the end of a few days the man would set out alone, in order to take possession of his lot; he made preparations for settling down, and finally took his family there. He was granted a few advances, and also seeds; his resources were increased by employing him as a day-labourer, as near his allotment as possible, in building roads. The opening up of roads was indeed an indispensable piece of work. Formerly the only road in the neighbourhood of Curitiba was the Graciosa high-road, which was replaced by the railroad, and which placed the town in communication with the sea. From 1878 Curitiba gradually became, like so many French towns, the centre of a system of radiating highways, which served all the colonial suburbs; a little network of local roads, still isolated in a corner of the plateau.

On these roads were created a series of villages: Santa Candida, Orleans, Dom Pedro, Doña Augusta, Tomas Coelho. Side by side with the official colonies others sprang up spontaneously. The value of the land was only some 12s. or 13s. per acre. The purchase price of the allotments was no great burden to the colonist, whose debt scarcely amounted to 500 milreis.¹ When

¹ In San Paolo the liabilities of a colonist are far higher, and often amount to 3,000 or 4,000 milreis.

the price of land only a short distance from the town had risen, the Government enlarged the colonial area towards the south, in the municipality of San Jose dos Pinhaes, and towards the west, in that of Campo Largo.

A detailed visit to these colonies would reveal representatives of twenty nationalities, but two races are dominant: the Italians and the Poles—Galician, Russian, and Prussian Poles. They have now passed through the first difficult period. As a rule one sees, beside the poor cabin which sheltered the family during the first few years, and which is now used as a stable, the new house of brick, covered with stucco, with its flower-garden full of roses. In some parts the houses are already grouped together, instead of being isolated as they formerly were, each in the midst of its lot; hamlets are forming round the churches, which retain the architectural characteristics of the colonists' native country. The Poles are good carpenters; they like to build great belfries of Paraná pine, which is worked as easily as the European pine.

The different races have already begun to mingle. There are mixed Italo-Brazilian families; and there are marriages too between Brazilians and Poles. "My Polish daughters are delicious—*sie schmecken*"—the worthy priest of one of these villages told me; "the Brazilians come and steal them from me." The town, which is common ground, and in which all have business, brings the different races into contact; it causes a mingling of nationalities and a mingling of ideas, which would take ten times as long were this colonisation purely rural. The Italians have learned to vary their polenta of maize flour with rye bread (or *broa*, to use a corrupt German word imported from Santa Catharina or Rio Grande); and the Poles are gradually learning from their neighbours to like wine and to grow the vine, the sacred plant

of Italy. The grapes ripen well in the Paraná summer, and more than one Polish home has now its vineyard and its stacks of vine-poles.

The Poles, or so it seemed to me, have a greater power of expansion than the Italians. The Italian families are very strongly united ; children do not leave them upon marriage, and the household often comprises three generations ; if it is necessary to add to the resources provided by the cultivation of one allotment, which is often a small one, the sons go forth in search of work, and send home the money saved out of their wages. The Italian colonies have always furnished a large proportion of the navvies working at the construction of new railways. After a period of absence the sons return home.

Among the Poles, on the contrary, it is the usual thing for the son who marries to buy a new allotment, and if his resources are insufficient he will contrive at least to rent land for a fourth or fifth portion of its produce. The first good harvest will enable him to settle in his own home, for cash payment is not demanded, and the seller is content with instalments. In this way the Poles are gradually spreading westward, so that we find them to-day as much as twenty-five and thirty miles from the town.

Leaving Curitiba towards daybreak, and travelling in any direction except due east, where the marshy soil has prevented settlement, you may follow the roads of the town, amid the last pines forgotten by the hatchet, whose silhouettes upon the hill-tops recall the European landscape. There is the greatest animation on the road ; folks are flocking into the town to sell their milk, eggs, vegetables, or firewood. Women carry baskets ; little fair-haired girls drive Polish carts ; badly hung, but less heavy than those of San Paolo or Minas. In a hundred

different ways you feel that all this rural world lives by its neighbourhood to the town, and that the policy of President Lamenha Lins has borne good fruit.

The town, in expanding, has become industrial; some factories are already established. The workers are recruited largely in the colonies. They come in of a morning and leave at night; or, if the distance is too great for the daily journey, they return home only for their Sundays. Women also find industrial employment in the cotton mills; others, and a larger number, go into domestic service. The Polish woman, before marrying, goes into town to earn her living. Each family living on its land is thus able to reduce its expenditure. The least gain added to the yield of the land immediately procures them ease and plenty.

Between 1878 and 1880 there occurred in the Paraná, during an extensive occupation of lands around Curitiba, an incident of colonial history which affords an excellent example of the difficulties which the policy of official colonisation has to encounter; it is the Odyssey of the Russian colonists.

They were really Germans by extraction, who were settled on the Volga during the reign of Catherine II., but they still spoke their original language. President Oliveira Meneses relates that in 1899, at the moment of his assuming office, there were 2,000 of these immigrants, camped in the towns of the interior—Lapa, Palmeiras, and Ponta Grossa; and they were all demanding land. Twenty thousand more were expected; happily they never arrived.

They appeared to be ignorant and idle. If I may be allowed to give them a character from the documents relating to them, they seem to have been both primitive and violent; they were actuated by obscure sentiments; and the Brazilian authorities became increasingly weary

of, and angry with, their absolute lack of docility. They would take no advice. When they chose their allotments, they chose prairie in preference to forest. This caused general stupefaction, as the forest lands are more fertile ; and colonisation in Brazil has always been effected in the forests.¹ When this was explained they replied that the Brazilians knew nothing about agriculture.

They ploughed their fields with ploughs of their own making, sowing their maize like wheat, and waited for the harvest. They had a savage love of equality ; although there were buildings on their lots which would have sheltered at least half their families, all slept in the open air, in order that none should be privileged.

If one of their number died while they were travelling they abandoned the body by the roadside without further formality ; and it seems that they beat their wives on principle, affirming that this was the surest way of keeping them in the paths of virtue.

The harvest season brought with it a lively disillusion. Whether their style of farming was ill-adapted to the new conditions of soil and climate, or whether their lands were truly barren, the fact remains that no crop appeared. A sudden discouragement seized this people ; they decided to leave Paraná. All that was possible was done to retain them ; and as they were extremely pious the popes of the Polish colonies were sent to interview them ; but when they grasped the fact that these priests were not new arrivals from Russia, and that they were foreigners, they received them with volleys of stones, and would not hear them. Many reassembled on the coast, and finally re-embarked. All their colonies lost part of their population ; some were left completely deserted.

Some, however, after the failure of their attempts at

¹ As already explained, the superior fertility of forest land is probably due to the sterilisation of the soil by heat.—[TRANS.]

agriculture, changed their way of life, and took to cattle-breeding. The land they had received from the Government was good pasture, and suitable for the purpose; there they grazed cattle and settled down in Paraná. They do little work on the soil, but use their cattle for transport; this is their particular industry. I have spoken elsewhere of the Paraná wagoners. While Brazil as a whole, and the colonial region in particular, knows nothing of any but individual property, these wagoners hold property in common. The Brazilians were at first astonished when the Russians requested that they might keep their properties in common; but they granted them their wish willingly, as there was no need to measure the allotments. Many of these common properties disappeared when the colonies broke up; the lands returned to the State, which sold them again as it was able; but the idea of common property was so implanted in the minds of these people that it is to-day being introduced spontaneously wherever the larger groups of these colonists are settled. Twenty or thirty families club together to buy prairie lands, on which the oxen graze uncontrolled as they rest between their journeys.

The last years of the Empire are nearly a blank as to all that concerns the history of colonisation. The prosperity of the colonial surroundings of Curitiba becomes more and more conspicuous; but free lands become less and less plentiful. In 1884 Poles were asking for land near the capital; there was none. In 1885 five hundred Poles, who had refused land at the foot of the *serra*, were with great difficulty provided for some eight miles from the town. The programme of Lamenha Lins was exhausted; the surrounding colonies were amply sufficient to fill the market of Curitiba. If fresh colonies were to be created, it would be necessary to provide them also with new and sufficient outlets for their produce.

The immigration movement, after some years of interruption, revived under the Provisional Government. In seven years, between 1889 and 1896, Paraná received 51,000 immigrants. These were almost wholly Poles. Two principal groups of colonies were formed : one in the valley of the river Yguassu, which descends towards the west, crossing the whole plateau, and the other, still more remote, on the Matto Grosso highway, some days' journey from Ponta Grossa, where the railway from the coast has its present terminus. The most important centre on the Yguassu is Rio Claro. As for the western colony, it is known as Prudentopolis ; a name of a somewhat pedantic flavour, but which should recall to our minds the memory of the President of the Republic, Prudente de Moraes. Prudentopolis, the younger settlement, dates from 1896.

The legal position of the colonists was exactly similar to that of the immigrants formerly established about Curitiba. As the soil was of no great value in the interior, the allotments were of larger dimensions, amounting to some sixty acres. The colonist was always given—or such, at least, was the theory of the matter—a provisional title to his land ; and this was exchanged, after his debt was paid, for a final freehold title. In theory, again, he was required to pay the value of his allotment within a period of six years.

But the colonial administration proved itself inferior to its task. The measurement and delimitation of the allotments was executed hastily ; at some points even the surveyors, instead of marking the four corners of the allotment, contented themselves with marking its frontage on a line ; not troubling themselves about the discussions as to boundaries which were certain to arise later on. When the care of the colonies passed, in 1896, from the Union to the State, the situation became more

and more involved. The registers of the colonial debt had been irregularly kept ; there were even no charts of the colonies. The survey registers which should have been kept in order to record the owners of each allotment had gone astray or had never existed. A new cause of complication arose. The colonists had received no authorisation to sell their allotments before they had obtained complete possession of them ; but left to themselves they had forgotten this clause of the regulations. They had subdivided their land as it seemed convenient ; or they had given it up, transferring to the purchaser, along with the soil, the responsibility for the annuities which were still due to the Government. In the course of these changes the land had passed from hand to hand, without any written title ; there was no written record of such transactions. The State had omitted to maintain in each colony a permanent administrator, who could have exercised a continual supervision. It was represented only by visiting collectors, who went from colony to colony collecting the annual instalments. Incapable of elucidating the legal problems which cropped up in the course of their hasty visits, these collectors were unable to give any information to the public authorities.

The Government of Paraná finally grasped the fact that it was its plain duty to attack the problem with energy, and since the year 1905 it has undertaken completely to reorganise the colonies. All the documents relating to the various colonies have been collected ; when documents were wanting the evidence of witnesses was called in order to determine the legitimate owners of allotments. Each colonist, until his debt is finally settled, has his *dossier* at the Secretariat of Agriculture. Colonial property is to-day based upon solid foundations.

From the time when the administration used to neglect the colonies there has survived at least one

habit ; an extreme tolerance in the matter of the payment of annuities. Fifteen years after their concession few allotments are as yet owned in freehold ; and the directors of the colonies have instructions on the subject which really amount to this : that the colonists may pay when they like or as they can.

The irregularities which occurred at the beginning of the Polish colonisation had few other practical inconveniences. To my own knowledge there were very few quarrels about property or the delimitation of the allotments ; what there were related more especially to urban allotments, which had passed into the hands of tradesmen, who formed no part of the colonial population properly so called. The latter troubled themselves but little about the matter, and profited by the liberty accorded them without any fear of the dangers it might conceal. With regard to this liberty, the reorganisation of 1905 came in good time.

I was anxious to visit the Polish colonists in the west. Settled fifteen years ago, they have scarcely emerged from the vicissitudes of the heavy labour of the newly-arrived settler. Among them I found the living picture of what must have been the early life, forgotten already, of the German colonists of Rio Grande.

I travelled over the entire colony of Rio Claro. It covers a large area, being twenty-five miles long. Beside the wide rectilinear roads are ranged the allotments—their frontage being some 820 feet, and their depth nearly 3,300 feet—with a wooden fence in front. The small wooden dwellings are surrounded by peach-trees. The peach has been thoroughly adopted by the Poles ; in the season of flowering the entire colony is dappled with the pink masses of blossom. The parallel highways cut across a series of valleys, dipping into them and climbing a succession of ridges ; from each of these one sees a

fresh horizon, little by little invaded by agriculture ; from the last one finally descends towards the brimming waters of the Yguassu. The colony is one vast clearing, or more precisely a collection of little clearings ; which are gradually growing larger as one meets another, and will all combine when once the whole area of the allotments is cultivated. At present the degree of advancement differs from allotment to allotment ; sometimes the forest of gigantic pines, mingled with other species in the more fertile spots, has already receded far from the road ; sometimes the trees still surround the dwelling-house.

Every house has its field of rye. Rye has been imported by the Poles ; but it is, I believe, the only national product which they still produce. They have, in short, as farmers, adopted the habits of the *cabocle*—the native Brazilian squatter. They have—so the director of the colony told me—allowed themselves to be corrupted.

The indigenous agriculturist—he who is called the *cabocle*—a race-name which has ended by denoting a fashion of life—the sole master of the Brazilian forests before the colonist arrived—knows nothing whatever of the modern principles of rural economy, nothing of intensive culture. On the spot he has chosen for a clearing, he commences to fell the forest by means of the axe. A group of workers assemble, and during a day of labour, which is also a day of jollification, sustained by spirits and enlivened by songs, the *cabocle* prepares the soil. When the trees are felled they are left upon the ground ; when a suitable day arrives they are set on fire.¹

¹ It is interesting to note that the early settlers in Kentucky—among them the grandfather of Abraham Lincoln—cleared their fields in precisely the same way, the occasion being similarly one of common revelry. Frequently, however, the prostrate trunks were rolled into heaps (being more inflammable than the hardwoods of

The timber does not burn, but the fire consumes the undergrowth and clears the soil ; and the leaves, twigs, and creepers are reduced to ashes, which sufficiently fertilise the ground. Directly the ashes are cold a man sets to work with a big hoe,[†] making a hole at every step ; behind him comes a child, who drops a few grains into every hole, and covers them by scraping the earth together with a movement of the hand. The maize will ripen between the trunks ; the *cabocle* will not revisit his field, except to gather his crop ; unless he prefers to evade the labour of harvest, when he will leave the ripened maize to a herd of skinny pigs, who will faithfully remain there as long as any food is left. The *cabocle* will then assemble his herd, and set out to sell it in the town. The wild vegetation of the forest soon reconquers the burnt clearing ; on the slowly-decaying tree-trunks a new forest forms and matures. The *cabocle* will not return for generations ; not until the soil will furnish him an equally abundant harvest. So the *cabocle* wastes the forest, and also squanders space. His tools are the axe and the hoe ; as for the plough, he is a stranger to it. When the Algerians, on arriving at Curitiba, asked for ploughs, they were

Brazil) and converted into huge bonfires. In the light of recent discoveries as to the value of soil sterilised by heat, it is curious to note that the districts in which this practice held good were marked by a poverty more noticeable than that of the settlers on the buffalo-haunted prairie, or the solitary ranges where "log-rollings," as these instances of communal help was called—hence the modern literary term—were out of the question owing to the greater seclusion of the settler. Probably the "rolling" was due simply to the superabundant zeal supplied by the demi-johns ; and the Brazilian colonist may have reason to thank himself that his hardwood balks are too heavy to invite such demonstrations of neighbourly goodwill.—[TRANS.]

[†] Not many years ago a sharp stake, hardened in the fire, was the sole agricultural implement of the native cultivator.—[TRANS.]

told that there was not a plough in the State. The Russians, who brought ploughs with them, caused quite a nine days' wonder.

The settlers of Rio Claro imitate the *cabocle*. Less nomadic, since confined within the limits of their allotments, they return more frequently to the same soil; they do not wait until the forest has grown again before raising another crop; as soon as the underwood is a few yards high they burn the clearing once again. But they use no manure and possess no ploughs. Time will modify these conditions. In the midst of the forest, so long as the soil is encumbered by the trunks of trees felled by the axe, which fire is powerless to consume, it is impossible to use the plough. When the timber has decayed and is destroyed, the colonists will remember their European habits of tilth, and will once more plough the land. In the older colonies, near Curitiba, we already see wide ploughed lands. For the rest, the colonists will of their own accord improve their methods when the produce of their fields has acquired a marketable value, and the isolation of the colonies is a thing of the past.

The isolation has been so extreme that exportation has been practically impossible. There existed in the neighbourhood no centres of any importance. If a colonist wished to export anything he had to send it at least as far as Curitiba. And there were no roads in the colony. When I was there they were just beginning to improve and open up for wagons the old mule-tracks which ran through the forest. But I have seen elsewhere what these old Brazilian roads are worth: soaked by the rain, they are transformed into sloughs; as for the worm-eaten bridges, it is safer to cross beside them. Transport from the colonists' allotment to the river was sent along these tracks on pack-mules. Fortunately the Yguassu is navigable. From Rio Claro to the cascades which bar its

course up-stream, near Restinga Secca, it presents a navigable reach of 124 miles. Several colonies have been established in the neighbourhood of this great natural highway, which connects one with another. The steam launches which navigate the Yguassu could thus take maize on board at Rio Claro, and carry it as far as the foot of the rapids. There it was reloaded on the railway cars, and finally reached Curitiba, where, after paying such freight as one can imagine, it had to compete with the crops of the colonists of the suburbs. Can we be surprised that the exports amounted to nothing, or practically nothing ?

The same difficulties of transport exaggerated the prices of any articles imported. In this abnormal situation certain merchants did some very profitable business. They practised a double and always fruitful trade; buying from the colonists their surplus produce, and paying them, not in money, but in goods, of which the money value was never mentioned. But the export trade in the products of the colony was so limited that the most rapacious usurer could not have made a profit at this game if the colonists had been reduced to the sole resource of their surplus crops. Fortunately they found another : the *maté* harvest.

Maté saved the colonies of Paraná. It is a small tree, in appearance not unlike a slighter and less luxurious evergreen oak or ilex; its fleshy, heavy leaf contains aromatic properties which are extracted by means of infusion. The use of the infusion of the *maté*-leaf is already a matter of ancient history. To-day *maté* is used throughout the whole southern half of South America; in Chili, the Argentine, Paraguay, Uruguay, and the border regions of Brazil. The infusion is prepared in a gourd, from which it is sipped, a little at a time, through a reed, a straw, or a silver tube with a perforated bulb which acts



FALLS ON THE RIO DOS PATOS, PARANÁ.



as a strainer ; the gourd goes the round, each member of the company drinking in turn, and the foreigner is not spared. To refuse *maté* would be to fail in the rules of *savoir-vivre*.

Paraná is the centre of the *maté* trade. The exportation of *maté* is to Paraná what the exportation of coffee is to San Paolo. It is the basis of all local economic existence. With the exception of the colonies, all Paraná, directly or indirectly, lives partly or wholly by the gathering, preparation, transport, or sale of *maté* ; and the colonists themselves have made large profits by it.

Maté is not cultivated. It grows freely in the forest, and in the forest its leaves are harvested. As soon as plucked the leaves undergo a first preparation, which is designed principally to diminish their weight before transport, but also to prevent their fermenting or turning sour. They are dried at the fire, and are then packed in sacks which are sent to Curitiba, where improved mills reduce the leaves to powder, separate the various qualities, and deliver the product ready for consumption. Some colonists, more fortunate than others, found on their allotments large numbers of *maté*-trees ; this meant for them a small fortune acquired without labour. The *maté*-leaf, or *the leaf*, as they call it in Paraná—a light but precious merchandise—bears the cost of transport more easily than maize ; so that the owners of lots upon which *maté* is found are able to make a profit by the sale of their leaves. Such good fortune is unhappily rare.

The great *hervaïs*, as they call the forest cantons where *maté* grows abundantly, are nearly all in the interior of the State ; beyond the colonies, on that portion of the plateau which approaches the Paraná River ; a country little known to geographers, but which, thanks to *maté*, is not lacking in importance nor economic vitality. At the season for plucking “ the leaf ” it is intensely animated ;

a veritable army goes into camp, and all the forest paths are busy. From the eastern border the pack-mules carry their loads of leaves as far as the roads which lead to Curitiba, capital of the trade ; and to the west the paths are no less busy. There are Paraguayans, coming to take part in the harvest, and Paraguayan smugglers, who seek to cross the river without being sighted by the Customs officials ; for a large portion of the harvest is destined for the border regions of Paraguay and Misionès.

In the *hervais*—whether public or private lands—the harvest is farmed out to contractors, who undertake to organise it. They employ a numerous staff. Each contractor constructs a hearth for drying the leaves, and this hearth becomes the centre of the little ephemeral world which lives for a few months in the heart of the forest, leading an isolated and laborious existence. Four or five tons of leaves are often prepared in a day. Some of the workers prune the trees ; the others dry the leaves. The gangs are recruited from all over the State, and from the first day of harvest the Polish colonies furnish a good number of recruits. The men alone leave the colony, the women remaining to take care of the allotments. Some of the Poles are simple workmen, while those with more initiative are themselves contractors. All bring from the forests the money representing their wages or their profits, and on this money the colonies have managed to live.

The sums of money which enter the colonies on account of the *maté* harvests are very irregular. The price of *maté* is extremely variable, and wages rise or fall according to the value of the leaf.¹ The price of the leaf has often fallen to such a point that the trade in *maté* has been almost suspended, and there has practically

¹ The average value of the exports of *maté* from the two chief ports of Paraná is given officially at a little over £1,000,000.—[TRANS.]

been no harvest—a serious matter for the colonists. But it is more easy to remedy a *maté* crisis than a coffee crisis. The cultivation of coffee cannot be abandoned for a year without the plantation itself disappearing, without the capital which it represents being swallowed up. Whatever the market value may be, the *fazendeiro* is obliged to produce, and to produce as much as possible. The crisis does not immediately result in a reduced production. But nothing is simpler, when the profits threaten to be too small, than to abandon the *maté* harvest for a year. The forest is left to itself; production having diminished, prices re-establish themselves; when the right moment arrives the harvest is resumed. Consequently the profits which the colonists owe to *maté* have never been lacking for any long period.

These profits have not been sufficient to create wealth, but they have at least staved off a general crisis, leading to the diminution or perhaps the total abandonment of the colonies. They have enabled the colonists to exist, although no market existed for their products, and although their isolation forbade them any kind of economic organisation.

Since the opening of the San Paolo and Rio Grande Railway this period of total isolation has come to an end. Crossing the plateau, this railway will very shortly place the southern States of Brazil in communication with the central States. In 1907 the trunk line through Paraná was almost completed; the connection with San Paolo to the north was not yet completed; but to the south the line already penetrated the State of Santa Catharina. At Ponta Grossa a junction was effected with the old line to the capital and the sea beyond; and direct communication was established between the whole route of the San Paolo and Rio Grande through the forests of the interior, the centre of the State, and the ports of exportation.

During the long years when the line was being slowly constructed, the colonists found employment on it as navvies. Open to traffic, the railway will greatly improve their condition. Shortly before it crosses the Yguassu the track cuts across the lower end of the Rio Claro colony; and a station has been established there. This spot is at the foot of the Serra del Esperanza, twenty-five miles from the river and the port of the colony by which it formerly communicated with the rest of the world; and there, in the most distant quarter of the colony, were the most desolate allotments and the most poverty-stricken colonists. I passed that way four years after the line was opened; there had been a transformation. The railway is like a vivifying artery. The new roads cut through the colony all make for the station; the land near the railway has risen in value. Near the station, and on the site of one of the old allotments, a little centre has already sprung into being; there is an innkeeper, a carpenter, a farrier and blacksmith, and several of those large stores with universal stocks through which the whole importation and exportation of the colony is effected. But the old centre of the colony, its official capital, near the Yguassu, the village of Rio Claro, is little by little emptying itself; several of the houses which surround its tall church are to-day deserted. One might say that the colony has changed front; but, better still, it has begun a new life. The products of the soil—especially maize and beans—have acquired a marketable value; and—sign of the new order!—this value follows, although slowly and imperfectly as yet, the oscillations of the distant markets of Rio and Buenos Ayres: a true index of the fact that this little isolated centre of life has at last found its place in the general economic life of the world.

As poverty disappears, the life of the colonists becomes more varied and more intelligent. The seeds of division

of labour appear ; a few colonists have become artisans. This little hive, in which the allotments were like so many identical cells, is changing its nature, and shows signs of exhibiting a less artificial grouping of humanity. The circle of interests is enlarging ; moral life even is developing. Politics have reached the colony. Prudentopolis forms to-day an independent municipality, and administers its own affairs. In default of politics men's passions find other food. I will instance a kind of strike, of a quite unexpected nature, which I witnessed in Rio Claro. The Poles, religious people, after long discussions and conferences, had gone on strike against their priest ! The priest, in these colonies, being of the same race as the colonists, is, in a sense, their representative. He directs the school ; and the parish is a kind of administrative entity, with embryonic traces of public services. Now the Poles, discontented with the demands of their priest, abstained, in obedience to a general order, from going to Mass, and began to get married by civil process. It must have required stormy circumstances to provoke a strike, for strikes are hardly known in Brazil ; and the children even were not baptized. The strike was of long duration ; famine reigned in the presbytery ; but both parties were intractable. Was peace arranged ? I have never heard ; but imagine the excitement that must have reigned from one end of the colony to the other !

Such are the impressions I received during my sojourn in the colonies of Paran  .

CHAPTER XII

COLONISATION IN RIO GRANDE DO SUL

The situation of the colonies—The forest of Rio Grande—German and Italian colonists—The present prosperity of the colonies—The trade in the products of the colonies—The land question in Rio Grande—Contrast between the colonies and the *campos* of Rio Grande—Colonists and Guachos—The success of the colonial policy in southern Brazil.

IN Europe the colonies of Rio Grande are better known than those of Paraná; because they are of earlier origin, and especially because their population is partly German. The colonies of Rio Grande have interested the French as a German rather than a Brazilian question. Will the German colonists become absorbed by their Brazilian environment, or will they remain the champions of "Deutschtum" in South America? The problem has been studied by M. Tonnelat in a recent book.¹ We may consider it solved. There is little probability that this small group of Germans will succeed in maintaining its nationality; especially as it does not appear greatly anxious to do so. We must not be deceived by the attitude of a few journalists in Porto Alegre or San Paolo, who are Germans recently immigrated, and do not always express very faithfully the sentiments of their readers. In any case, the Germans do not form a

¹ E. Tonnelat, *L'Expansion allemande hors d'Europe*.



A COLONY : RIO GRANDE DO SUL.



majority among the colonists of Rio Grande; the Italians surpass them in numbers. It is my object in this chapter to describe, before all else, the economic life of the colonies. Rio Grande, of all parts of Brazil, was the most favourable to immigration by reason of its physical characteristics. Placed under the 30th degree of latitude, it is well out of the equatorial zone. The seasons are well defined; winter is boisterous and healthy, summer dry and hot; while the rainy summers of the tropics are the rule at San Paolo, and often extend as far south as Paraná. Colonisation, which in San Paolo and Paraná is limited to the inland plateaux, in Rio Grande is equally distributed over the slope of the Serra do Mar and at its foot. The capital, in the centre of the colonial district, is on the same level as the lagoon, whereas the capital of Paraná is nearly 2,000 feet above sea-level.

The slope of the *serra* has been the principal field of colonisation, the great attractive centre of the population. It has thus played in Rio Grande a part exactly the contrary to that which it fills towards the north, along the whole length of the Brazilian seaboard. Nowhere, except in Rio Grande, has the belt of covering forest been encroached upon; nowhere else have clearings been attempted. From Espiritu Santo down to Paraná it separates the fields of sugar-cane cultivated at its feet from the great agricultural regions of the highlands. In Rio Grande, on the contrary, the first colonies were formed in the forests of the *serra*, and it is by travelling along the flanks of the *serra* half-way between the foot and the crest that colonisation has spread westward.

That the *serra* has played so significant a part in Rio Grande is due less to the lower latitude, and less to the temperate climate, than to its geological structure and the nature of the soil. As far as Paraná the Serra do Mar

is constituted of granites and of gneiss ; these yield a poor soil, all the more unproductive because for ever washed and impoverished by the rains. But below Santa Catharina the *serra* is formed of eruptive rocks, and becomes a gigantic basaltic breastwork. The same basalts compose the *serra* below the elbow, where it turns inland from the Atlantic, running westward towards Uruguay. The basaltic outcrop covers the granitic axis of the *serra*, which reappears further to the south, beyond the town of Bagé, before it loses itself in the plains of the Pampas. Basalts yield inexhaustible soils, like the red earths of San Paolo ; equal in fertility to the alluvial deposits of the Pampas, they have made the fortune of the colonies of Rio Grande.

Like the diabasic soils of San Paolo, they are associated with the red sandstones. To the north of Porto Alegre, in the spurs and bastions of the range, the red sandstones fill the bottoms of all the valleys. Such tracts are at present mostly pasture-land. The landscape, modelled by the waters, has assumed softer forms. Above the sandstones, the harder basalt forms high gloomy cliffs. The naked rock rarely appears ; one divines it only by the greater steepness of the slope, and the sudden outburst of vegetation on the richer soil. Once this barrier is crossed we come to these fertile soils, where the land was cultivated from the first and has been ever since.

The country surrounding Porto Alegre offers yet another advantage to the colonist : the most complete system of navigable waterways which exists in Brazil outside the basin of the Amazon : a system of no less than five rivers which debouch into that end of the lagoon on which Porto Alegre is built. From the very beginning of the colonial period these rivers were navigated and full of animation. Even to-day, by their competition with the railways, they keep down the cost of

transport. They have at all times been of the greatest service to the colonist.

São Leopoldo, the first of the Rio Grande colonies, was founded in 1824. The independence of Brazil had only just been proclaimed ; but already the new Government was resolutely pursuing the policy of official colonisation. From 1830 to 1843 the civil war interrupted the arrival of immigrants ; but once peace was established, the province resumed the colonial policy on its own account. It increased the subsidies paid to colonies and the premiums paid to immigration agents. This first period of colonisation, when the provincial authorities retained the administration of the colonies, came to an end in 1859, when Von Heydt's decree forbade the departure of German emigrants for Brazil. Before that date practically all the immigrants were Germans ; it was then that the little German-Brazilian community to the north of Porto Alegre was formed. Since 1859 the annual number of German immigrants has always been extremely small, never having exceeded a few hundreds.

From 1870 to 1880 Italian immigrants replaced the Germans. The Imperial Government, in order not to leave the German colonies isolated on the southern foothills of the Serra Geral, created new colonies on the upper slopes, and also on the opposite side of the crest. The Italians who were settled there were mostly from the Venetian provinces. Their arrival was not interrupted by the fall of the Empire. They still continued to arrive some time after the Federal Revolution, which was quelled only in 1893. Since then both Italian and German immigration have ceased. To complete the enumeration of the races which have taken part in the colonisation of Rio Grande, we may add that the "Jewish Colonisation Association" has

recently created the colony of Philippson for Bessarabian Jews. The success of this venture has not been remarkable, and the little group of Bessarabians will probably remain an isolated experiment. In the Argentine the Jewish colonies have multiplied and are very numerous, and the Jews form an important element of the agricultural population ; but there is no reason to believe that they will ever hold a like position in Rio Grande.

The German and Italian colonies experienced the same difficulties at the outset ; I should say the same difficulty, for all their troubles arose from a single cause : isolation, the lack of an outlet. The roads were bad, transport was costly, and exportation was necessarily extremely limited. The soil yielded rich crops, but the colonists did not know what to do with them. The official reports represent the colonists as living in the midst of abundance. They were not untruthful ; for each allotment would feed a family abundantly ; but they did not tell all the truth ; this abundance was not wealth. The soil was fertile in vain ; the economic lethargy of the colonies was complete.

The German travellers who visited the colonies towards the middle of the century depicted their misery in so tragic a fashion that European feeling was aroused, and the end of the matter was that German emigration to Brazil was forbidden.

Perhaps the reports of these travellers were too severe. One fact at any rate seems to contradict their pessimism : namely, the extraordinary power of expansion which these colonial populations manifested from the beginning. This was no less notable in the case of the Italians ; but the Germans were on the ground first, and have had the time to produce the most astonishing examples. They have multiplied in an almost miraculous

manner. When the colonists of German race are numbered to-day it is hard to believe that all these people are sprung of the small number of immigrants who came from Germany to settle in Rio Grande. A general census effected in 1859, the very year when immigration was prohibited by decree, gave the total population of all the colonies as 20,493 inhabitants.¹ How, in the space of hardly two generations, have these 20,000 colonists contrived to give birth to a population ten times as great?—for the number of inhabitants of German blood in Rio Grande is at present estimated at 200,000.

The extent of colonial territory has increased in proportion. It is not only from necessity that the colonists incessantly labour to thrust back the limits of the forest, but also as a speculation. Some of them sell the land they have cleared to new arrivals, and for themselves buy fresh allotments more remotely situated, which they will sell in turn when their value has increased. A certain general used to say that in his army it was always the same men who used to get killed. It is the same in the conflict between man and the forest; it is always the same men who colonise the soil. Behind these pioneers, protected by them, progresses a population which is less adventurous and less enamoured of solitude. The process of colonisation remains the same. I was able to observe it on my journey, in the Italian colonies as well as in the German. The method dates back to the dawn of the colonial period. As early as 1858 the reports of the President of the Province stated that a number of families at São Leopoldo were scattered among the most recent allotments, preferring to acquire

¹ This figure is obviously greater than the actual number of immigrants; for in 1859 there were colonists established at São Leopoldo who had been settled there for thirty-five years and had founded families.

fresh soil and to sell the lots they had already cleared. Los Conventos, Estrella, and Santa Maria were peopled by families from São Leopoldo ; for the rest, said the reporter, they were found throughout the province.

This conquest of the soil by the colonists was soon arrested, as in San Paolo, by the difficulty of finding land for sale. The private landowners imitated the example of the Imperial Government and the provincial authorities, and offered their land on similar terms. They were deriving no income from it ; they could not hope to develop any fresh agricultural industry upon it. When their land found a purchaser they considered themselves fortunate, and willingly sold it at very moderate prices, payable over a period of several years. The usual price was about 10 milreis per hectare—about 8s. 2d. per acre. Some landowners, to hasten the sale of their land, organised private properties on the model of the official colonies, and subjected them to the same regulations. Such was the origin of Mundo Novo, Santa Maria da Soledade, Estrella, Conventos, São Lourenço, &c. . . . Through all the colonial region there was a general expropriation of land by private contract. The land has changed hands. The immigrants of European race form the only landowning class to-day. An insignificant proportion of the soil has remained in the hands of the heirs of the great landowners who possessed the whole before the commencement of colonisation.

Although the colonies originally existed in poverty, their condition is more fortunate to-day. Reaching Porto Alegre by the winding channels of the duck-haunted lagoon, and ascending the valleys which have their outlet at that point, one can but feel, upon reaching the region of the older colonies—São Leopoldo or Hamburger Berg—a keen admiration for the aspect of this



A COLONY : RIO GRANDE.

happy countryside. I remember the vast panorama which we discovered one evening, from the vantage of the hills which dominate Dous Irmãos. A wide valley opened at our feet, covered with trees and meadows ; closed in the distance by the *serra*, of which the base was covered with growing crops, and the steep slopes of which were still partly wooded. Colonisation crossed the range a long time ago, for it is on the plateau beyond that the vineyards have been planted. In the valleys, in the midst of the fields were white houses and a village ; its aspect that of a European village. Nowhere in Brazil, save perhaps in some of the coffee districts of San Paolo, and on some of the sugar plantations, have I seen a landscape which gave so completely the impression that here man was truly at home, had made the soil truly his own.

But in the cane-fields, and even on the coffee plantations, the labourer inhabits a miserable dwelling ; a foul, narrow shelter. Compared to such, the home of the Rio Grande colonist is a palace ; this it is that gives the landscape its peculiar character.

There has been much building in the Rio Grande countryside during the last few years. Economic prosperity immediately translates itself by this visible sign : the colonist who makes money embellishes his house, while the Italians of San Paolo keep their savings fluid. The climate of Brazil is too warm to have taught the Brazilians the meaning of the word *home*. The Brazilian population, to judge from its dwellings, camps upon the land instead of residing on it. But the German colonists have brought to Brazil the love of a comfortable house, and each of their houses is a true home. Whether or no it was due to the contrast furnished by other parts of Brazil, where man is more modestly lodged, it is a fact that while travelling through these colonies I gained

everywhere the same impression that one experiences when passing through the richest agricultural regions of Europe.

The interior of the house is furnished with taste, and the house is kept neat and clean. A poster of the Hamburg American steamship line—an economical decoration—invariably hangs upon the wall. If you spend an evening in one of these houses you will receive not a more cordial, but a more comfortable, hospitality than is usual in Brazil. The diet will be varied and abundant, and the dinner served in the German manner. At night you will sleep on a feather-bed, as though you were in Thuringia or the Black Forest. The Rio Grande winter, it seems, is an excuse for feather-beds; although the Brazilian bed of interlaced thongs would be more comfortable in the summer.

Such comfort is the privilege of the oldest colonies; as one leaves the primitive nucleus of the colony to penetrate the zones of recent colonisation the general prosperity appears less general or less firmly established. Nevertheless, however far one were to travel, I do not think one would anywhere find the poverty and the suffering which the first families underwent, when established sixty years ago in the forest solitudes. The pioneers of the advance-guard scattered through the forest to-day are fighting a hard battle, but they are volunteers, full of hope, and counting upon a comfortable little fortune in the near future; they are a conquering army, not a handful of demoralised exiles.

The Italians do not build as do the Germans, although they appear to have struck root as deeply in the country. The vine is always the sign of an Italian home; even when they do not sell wine the Italians make it for their own consumption, and their houses are often covered with trellis-work. As for the Russian Jews,

whom I also visited, they had scarcely settled down, and were still absolute strangers. The administration of the colony, in its rather too paternal foresight, took some pains to give them the illusion that they had not changed their country. The houses which were built for them seemed imported whole from southern Russia, with their stoves built in the thick central partition. There they live, with the fidelity to patriarchal customs which characterises their race.

The increasing comfort of these colonies is due to various causes. They are free of the evil common to all the old countries—the increasing subdivision of the soil, which becomes greater from generation to generation. In Rio Grande there is no suffering from the plague of too small properties, so common in Italy. Every colonist owns, as in the beginning, his lot of seventy-four acres, his “colony”; and I have seen very few families in possession of a half-colony only. There is no lack of soil; the sons do not share the paternal inheritance between them; one of them retains the entire holding, on condition that he helps his brothers to acquire other holdings further inland on which they can settle. Each colony is amply sufficient for a family, and furnishes nearly all its needs.

The isolation from which the colonists suffered formerly is now less aggravated; the roads have been improved; the railway to-day connects Porto Alegre with the Argentine frontier, running at the foot of the Serra Geral, where the colonies are thickest. Already a branch line is climbing the slopes, and will serve the colonial region on the other side of the crest. This line will serve as a feeder to the San Paulo and Rio Grande Railway. There is also a proposal afoot for completing the small local system which serves the country to the north of Porto Alegre, where the density

of the population is highest. The colonists will thus have every facility for exporting their products.

They have also a market at their disposal. The city of Porto Alegre has grown ; to-day it numbers nearly 100,000 inhabitants. This urban population is nourished exclusively by the colonies.

At Porto Alegre are sold the potatoes and rye which the Germans grow side by side with the national food-crops—manioc and black beans. There are now other outlets in addition to Porto Alegre. To begin with, in the south of the State we find a great belt of prairie land devoted to raising cattle, and the towns where salt meat is manufactured. This region is becoming more and more dependent on the colonial region, which sends its products by water, across the lagoon. A short time ago the colonies conquered a more remote and more capacious market, and won all Brazil to be their client. Exportation would develop still more quickly if access were easier to the port of Rio Grande ; but its sandy bar will often hold vessels up for weeks ; it closes the Rio Grande, and once more isolates it from the rest of the world. From Europe to Rio de Janeiro the voyage takes fourteen days ; from Rio to Porto Alegre it often takes longer. The export trade of the colonies consists almost entirely of articles of luxury, such as wine, produced by the Italian colonists, which sells in San Paolo and Rio at 1s. 3d the bottle, and hog's lard manufactured by the German colonists. It is in this form that they contrive to obtain a profit from their inexhaustible fields of maize.

A considerable fraction of the population lives by trade. Small centres have grown into large, their *raison d'être* being trade, not agriculture. Their prosperity is less stable than that of the agricultural centres ; sometimes circumstances displace them. Nova Hambourg was

built at the head of the railway, at the point where the colonial produce use to be concentrated before being dispatched to Porto Alegre. But the line was prolonged as far as Taquara: immediately Nova Hambourg declined, the population decreased, the value of the land diminished; and this insecurity of fortune is typical of the progress of the economic life of the colonies.

Finally, the colonial region has not remained exclusively agricultural. Small industries have been established there; that of tanning in particular. From São Leopoldo to Hamburger Berg the odour of tanneries pursues one. In every house along the road are leather-workers. Here they make hand-sewn footwear, there they combine wood-work with leather-work, and manufacture trunks. The hides, the raw material, do not come from the colonies themselves, but from the south of Rio Grande; from the great slaughter-houses of Bagé and Pelotas. Formerly, through lack of home labour, these hides were exported and supported foreign industries; but the abundance of labour in the colonies has resulted in the rise of this industrial centre, which exports its manufactures throughout all Brazil. Under the system of Brazilian protectionism this industry is the source of such profits that in some parts the population has abandoned agriculture to give itself entirely to industry, and the fields lie fallow while the workshops are busy.

One fact which is sufficient to demonstrate the prosperity of the colonies is the increase in the price of land. Lots which originally sold for about 300 milreis (or £20 to £30, according to exchange) have since then been sold for forty or fifty times that price. Even outside the particularly favoured districts one could not obtain a "colony" of seventy-five acres for less than 200 or 300 milreis per hectare, or £5 to £7 10s. per acre, except by going to the

limit of the cultivated lands, where the State is now trying to create new colonial centres.

It is not on account of its fertility that the price of land in Rio Grande varies, but on account of its situation, and the expenses of transport which its products have to pay, so true is it that agricultural labour is not productive unless outlets are open to its products. A theory of the rent of land, if evolved in Brazil, would undoubtedly differ from the classic theory, as it would be based entirely upon this serious question of transport.

The colonisation of Rio Grande suffers a serious peril from the fact of the insufficient legal organisation of property in land. As in Paraná, the demarcation of lots and the distribution of titles of ownership was not always undertaken with desirable care. This disorder gave rise to various proceedings between colonists, on the subject of the boundaries of such and such a lot, or its legitimate attribution to such and such a proprietor. But the trouble was not serious. It was otherwise when, a few years ago there was a question concerning the Rio Grande territories, which the German Press took up with a great deal of heat. It affected, as a matter of fact, the wealth of a great number of colonists. To understand the matter we must retrace, in a few words, the history of landed property in Brazil.

The Province of Rio Grande had devoted to colonisation the lands of the public domain. At the same time a large number of private freeholders colonised their land. Now the greatest uncertainty prevailed as to the boundaries of the State lands, and this double accident resulted : on one hand, the authorities sold private land, and on the other hand, landowners sold public property. The second case was, one may suppose, more common than the other. It represented, in a very widespread form, the usurpation of public lands.

The soil, in Brazil, belonged in principle first to the King of Portugal, then to the Government of the Empire ; and then, after the republican Revolution, the States inherited, each in respect of its own territory, the rights of the central Government. Now the King had made donations of land to certain of his subjects. These lands were called *sismaries*, and these, divided by the hazard of succession and sale, were the origin of private property in Brazil. But beside these private lands originating in the *sismaries*, there had been, from the very first, lands possessed without titles ; properties in fact but not in law, whose owners obtained them for the sole reason that they had been occupied by them, or by their assigns, at some date very often remote and forgotten. The free lands were too extensive for any one to dream of contesting the possession of such domains. It was only in the middle of the nineteenth century that the Government began to foresee the enormous value that landed property might in time acquire ; it then considered that it was time to regulate the occupation of land. The law of 1850 enacted that occupation would never in future be considered a title to property ; but that for all occupations anterior to 1850 which should be regularly verified and inscribed, the occupier should receive a title of ownership. The law of 1850 was a law of settlement or liquidation ; it was to put an end to the usurpation of State lands. Unhappily it was not faithfully applied. Occupations were simulated, and inscribed as though genuine, and anterior to 1850. These usurpations continued until after the Revolution. In Rio Grande especially they were effected on a large scale ; between 1885 and 1889 alone more than 740,000 acres were involved.

As soon as usurped, this land was given over to colonisation ; so that at the beginning of the Republican

period a large number of colonists found themselves established on soil which had been illegally taken from the public domain. The statesmen of Rio Grande, anxious to repair as far as possible this dilapidation of the fortune of the State, in 1897 instructed a commission to hold an inquiry into the illegal concession of land titles. In less than a year the commission had already notified 30,000 acres which ought to be returned to the State, having been fraudulently subtracted from its patrimony. Instead of expelling the then proprietors, the State preferred to condemn them to the payment of an indemnity, in proportion to the extent of the land occupied. This measure caused a great commotion, and provoked a violent agitation among the colonial population. It had struck at a great many guilty individuals, spoliators of the public domain, from whom it demanded a moderate indemnity in settlement of their fraud ; but it also affected innocent people, since there were colonists who in all good faith had bought and paid the ostensible owners for land which the State was now claiming. The State was forcing them to pay for their lots a second time : was this not equivalent to an actual confiscation ?

The Rio Grande Government, understanding this point of view, took a generous course of action. By the decree of February 10, 1903, the President of the State, "considering that there are in existence administrative judgments legitimising properties arising from the occupation of lands, which were given conformably with the law of 1850, but which have only been obtained on fraudulent grounds or by fraudulent evidence ; considering further that such judgments are susceptible of revision, as the State has the incontestable right to obtain by legal means the restitution of its own patrimony ; considering, however, that these lands are no



SPANISH CAMOUILLE : RIO GRANDE.

longer in the hands of their first possessors, but in those of Brazilian or foreign colonists, who have obtained them in small lots and at a high price; and that these, having acquired their lots in good faith, are worthy of the protection of the State, both because it is impossible for them to obtain from the vendors a restitution of the money which they have paid them, and because the community owes them a considerable debt for having reclaimed and cultivated these lands; decides that those colonists who shall have acquired a parcel of land under these conditions are discharged of all indemnity towards the State." The State thus renounced its rights in favour of the colonists. It would have been unjust to make them responsible for the negligence which the Government had so often exhibited formerly in the matter of defending its domain. Since the State had previously applied the laws imperfectly, it ought to bear the consequences of its own errors. This colonial property was created at the moment when the Brazilian rights in property were being transformed; but when the State ceased to tolerate the occupation of public lands, it could not, in equity, give this novel strictness a retroactive effect.

Since the decree of 1903 there has no longer been a land question. The commissions of inquiry were suppressed in 1905. In 1899 a law was passed regulating the position of land in Rio Grande.¹ It decided that the simple occupation of land without titles could not be legitimised unless such occupation were anterior to 1889. As for lands occupied after that date, the occupants would only have the right of purchase from

¹ Analogous laws, intended to check the occupation of public lands, which the law of 1850 had by no means impeded, have been voted in a large number of states since the Revolution (San Paolo, Rio, Paraná, &c.).

the State at a price to be determined. This was a great advantage to colonisation. It assured the ground under its feet ; allowed it to enjoy its past conquests with security, and to expand without anxiety.

Colonisation has taken as its domain the forest region of Rio Grande. Colonisation and deforestation are synonymous. For this reason the law of 1889 relating to land and colonisation also deals with the protection of the forests. Not only does it forbid the successful applicant for a colonial allotment to clear more of the forest upon his land than is necessary to make room for his crops, so long as the purchase price is not fully paid up, but it endeavours to organise the treatment of forest land throughout the State. By this law the forests covering unsettled land are subjected to public supervision. The protected zone comprises all such wooded areas as regularise the flow of rivers, and prevent the torrential downpour of waters. The protection of the forest is all the more indispensable because it is as a rule destroyed for the purpose of not only selling the timber, but also in order to replace it by crops. The colonist went forward, axe in hand, too wanting in insight to respect those portions of the forest which it was imprudent to fell, and in return for which agriculture would never give him any but inferior crops ; sacrificing trunks which are the growth of centuries to a few uncertain harvests. It was time for the administration to open his eyes. Of all the States of Brazil, Rio Grande was the first to think of setting a limit to deforestation.

Colonisation has never reached so far south as the region of the *campos* : that is, the prairies. The southern half of Rio Grande is occupied by vast undulating prairies which join those of Uruguay and the Argentine to the south. Is not their soil adapted to agriculture ? The cattle-breeders who live there have always grown

maize ; and one of the largest landowners of the *campos*, Senhor Assiz Brazil, asserts that the soil will never attain its full value as long as it is entirely given up to stock-raising, and that it would yield superior profits if devoted to agriculture. Some bygone attempts at colonisation, however, were very short-lived ; and even to-day, in spite of the examples of the Argentine and Uruguay, there are very few agriculturists on the *campos*. It is improbable that the prairies of Rio Grande are as fertile as the deep alluvial deposits of the Argentine Pampas. Wherever I went I could see only a thin coating of mould, which nourishes a tolerable pasture, but which would soon be exhausted by crops of cereals.¹

Be this as it may, the prairies have remained the uncontested home of the stock-breeder. The passage of the train startles cattle, with wide, heavy horns and powerful shoulders, and frightened horses, which gallop away tail in air. Carcasses dot the plain ; some recent, with skeletons still intact ; some ancient, the bones dispersed by the winds, the rains, and the vultures. Winter decimates the herds, which remain exposed on the prairie, unsheltered amid the scanty pasture. In summer they suffer from drought. Only in the spring, when the prairie awakens, the survivors, gaunt with fasting, revive, grow fat, and multiply after their kind. Over this animal world reigns the nation of Guachos : admirable horsemen, always in the saddle, many of them still barbarians. Their work consists chiefly in counting the cattle, and in selecting, in due season, those beasts which are in good condition and of suitable age

¹ Soil which was long thought too thin and sandy has been worked at great profit in the Argentine by sowing lucerne upon it. Part of the holding is used as pasture ; part produces a crop of lucerne fodder ; next season part is ploughed and sown with cereals, producing abundant crops.—[TRANS.]

for the market ; these they drive to the slaughter-houses. The implement of their calling is the lasso.

The contrast between the Guachos and the colonists is striking. One of the most characteristic facts of rural Brazilian life is the difference between the pastoral and agricultural populations. Nowhere is it greater than in Rio Grande. There are practically no regions in Brazil where agriculture is combined with stock-raising, as is the rule in the rural districts of France. In France the bullock does not merely represent butcher's meat ; the ox or bullock is a domestic animal as well ; the chief servant on the farm, he shares in the peasant's labours. In Brazil the plough is exceptional ; the earth is tilled by hand. The colonist has no domestic animals.

The colonies and the prairie exist side by side like two different worlds, having different occupations and different manners, and different also in origin. The colonists are of German or Italian blood ; as for the Guachos, their Portuguese blood is plentifully mingled with Spanish. Yet it would be untrue to say that neither of these neighbouring populations exerts any influence on the other. The Guachos, true aristocrats, have taught the colonists the taste for horseflesh ; but while to the Guachos the horse is the companion of his daily work, he is a luxury in the colonies. The colonists leap into the saddle on Sundays, or when there is no work to be done afield : men and women, the Italian women astride, the German in habits. The young people often prefer a canter to the traditional amusements : for instance, to the German *kegelbahn*. I remember watching, at the time of the electoral campaign, the cavaliers of the colony of Silveira Martines escorting their candidate. They had ridden out as far as Santa Maria, in the midst of the belt of prairie, covering the prairie tracks with their equestrian prowess.

COLONISATION IN RIO GRANDE 311

To sum up : The success of the colonial policy of Rio Grande is incontestable. This is all the more striking in that the difficulties at the outset were extremely numerous. By their activity, their powers of expansion, their increasing wealth, the little democratic republics which constitute the colonial populations are one of the best elements of the modern Brazilian nation. Their stability is complete. While San Paolo cannot always succeed in retaining its Italian immigrants, there is no movement of re-emigration in Rio Grande. One single drawback, which Brazilian opinion does not seem to take very seriously, is the resistance of the colonists to the process of national assimilation. Is this resistance likely to compromise the territorial unity of Brazil, or even her moral integrity ? This is a question I cannot enter into. The history of the colonies explains their fidelity towards their original nationality. For two generations they did not even come into contact with the Brazilian world ; so by what miracle should they have learned Portuguese and forgotten German ? The isolation in which they dwelt prevented them from becoming absorbed, and attached them more closely to their own traditions. The official origin of the colonies is responsible for this isolation. The Government decided upon their creation at a time when economic conditions would not have evoked their spontaneous growth. It chose a region far from all highways, and thus prepared for "the German question." Natural economic laws will have their revenge upon "interventionism." When the normal development of commerce brings colonists to a country of their own accord, and when they are able to grow produce for exportation ; when the circulation of gold in their settlements gives them the hope, or, at least, the illusion of wealth, then only will they become absorbed without

effort or opposition. Contemporary Argentina is the proof.

But if isolation and poverty have formerly made the Teuto-Brazilians refractory to assimilation, will not new conditions of life dispel this unwillingness? We have reason to hope so. Economic prosperity will of itself reduce the German citadel of Rio Grande. It has already effected breaches in the walls.



A PROVINCIAL CAPITAL.—PELOTAS, RIO GRANDE.

CHAPTER XIII

THE NEGRO POPULATIONS

Their number—Their distribution—The Minas negroes since the abolition—Competition with Italian labour—Negroes in the sugar-producing districts — Campos — Pernambuco — Urban negro populations—The economic inferiority of the black race in Brazil—Its puerility—Its pleasures—Negro songs and dances.

THE negro population of Brazil has not been numbered. We do not know its precise figures nor its numerical relation to the other populations. One thing at least is certain—that in several States it is more numerous than the white population. "Coloured folks" of all degrees are still more numerous in comparison with the pure negroes. The early Portuguese immigration was almost exclusively masculine ; from the union of the Portuguese with dark-skinned women sprang a line of half-breeds which has since increased.

Brazil abolished slavery only twenty years ago. The slave-trade was only completely suppressed about 1860. After that year various measures announced and prepared for abolition. In 1864 the "free Africans" were emancipated. This term was applied to negroes who were found on board the slave-traders by the vessels policing the seas, and who lived in Brazil in a state of semi-servitude, without having derived much benefit from their deliverance. In 1871 the law of the "free womb" enfranchised every child of a slave mother, and

suppressed the only means of recruiting slaves that remained since the extinction of the slave-trade. The abolition of slavery was only a matter of one generation. In 1885 all negroes over sixty years old were liberated. Finally, in 1888, the Imperial Government followed the example which had already been given by the provinces of Para and Ceará, and abolished the institution of slavery.

The negroes are to-day still gathered together in the regions where agriculture had been practised on wholesale lines before the abolition. They have remained on the soil where slavery held them bound : they have not profited by their liberty to disperse. The two States in which the negro population is densest are Bahia and Pernambuco ; in southern Brazil there are not many negroes. In San Paolo one rarely encounters negroes in the region of the new plantations or around such centres as Ribeirão Preto or São Carlos do Pinhal ; one meets them more frequently in the neighbourhood of Campinas, in the old agricultural belt.

Although we cannot state in positive terms that there is no prejudice as to colour in Brazil, yet manners and customs and traditions, where the negro is concerned, are infinitely more tolerant than in the United States. But the liberalism and even the indifference of public opinion do not prevent the negro question from arising in fact, if not in theory. Among the elements of which Brazilian society is composed the African element has its place. What advantage has the nation gained by the slave-trade—that primitive and barbarous form of gratuitous immigration ? What populations has it created ?

I will deal with the negro question first of all in the State of Minas, where black labourers are seen in the plantations in competition with whites ; and then in the sugar-producing centres of the Atlantic coast, where black labour has never known a competitor.

The *fazendeiros* of San Paolo welcomed abolition without regret. In Minas, on the contrary, the larger landowners conceived a lively resentment against the Empire on account of abolition ; a resentment which hastened the Revolution. The system of slavery was not so far shaken as it was in San Paolo ; the enfranchisement of the slaves suspended labour and disorganised production. Directly they were free the negroes deserted the plantations. The history of agriculture in Minas since 1888 is the history of its efforts to reconstitute the ranks of labour. In 1888 the negroes formed the great majority of the rural working population. To-day, again, on visiting the *fazendas* of Minas, one will see scarcely any but black labourers. How is it that they have resumed the labour they once deserted ?

The planters hoped at first to be able to dispense with the negroes, and to replace them. The example of San Paolo intoxicated the agriculturists of Minas. They wished to imitate San Paolo by organising gratuitous immigration. The Government of Minas persuaded itself that it owed the same duties to the planters of the State as those of which the Government of San Paolo was acquitting itself ; and in 1894 it undertook to defray the passage-money of immigrants. During three years the immigration service operated in Minas exactly as in San Paolo ; the object was the same and the same difficulties were encountered. The human reservoir on which the State of Minas drew was Italy, as was the case with San Paolo ; and it was in Genoa, where the commissioners of San Paolo were already at work, that Minas established a bureau of supervision and immigration. The immigrants were sheltered on their arrival in the asylums of La Soledade and Juiz de Fora, and thereafter dispersed throughout the agricultural districts according to the needs of the *fazendeiros*. Gratuitous

immigration was suspended on November 15, 1897, and has never since been resumed. Between 1894 and 1897 it had introduced 51,259 immigrants. To these we must add a small number who came at their own expense.

Probably the effective total of white immigrant labourers in the plantations of Minas never exceeded 100,000. But this figure, inferior as it was to the figures we have given for San Paolo, is nevertheless a proof of the efforts that were made to dispense with the assistance of the negroes. At one moment there was reason to believe that the white labourers would form the most stable portion of the plantation employees, and would be entrusted with the more delicate operations, while the negroes would be reduced to play an auxiliary part. Nothing of the kind occurred. The coffee crisis arrested the increase of white labour. It forced the *fazendeiros* of Minas to reduce the expenses of production, and white labour was a luxury which they could not maintain.¹ It was consequently gradually reduced.

Originally the white labourers were paid, as in San Paolo, for piecework. Those who have remained on the plantations are to-day *métayers*. So many acres of coffee-trees are entrusted to them, which they cultivate in their own way, giving in each year one-half of the crop. But it does not seem possible by the system of *métayage* to determine the relations of the planter to his labourers in a lasting manner. It cannot last long ; for it leads to the ruin of the plantations. Between the rows of coffee-trees the *métayer* grows maize ; he sometimes even grazes his cattle ; the coffee-trees suffer in the struggle against the cereals, and very soon present a half-starved appearance. Carlos Prates, the engineer, commissioned by the Government of Minas to study the agricultural conditions

It will be remembered that San Paolo coffee is of a higher grade.—[TRANS.]

of the south of the States, after having called attention to the increasing number of *métayers*, concluded that *métayage* is to-day, from the planters' standpoint, only a means of prolonging the cultivation of coffee. Thanks to *métayage* they count on being able to wait, without spending money, until a rising market shall permit them to resume less desperate measures. If the rise is long in coming *métayage* will destroy the plantations; and the last white labourers will leave the rural districts of Minas, or at least will no longer remain in the service of the large planters. Already the dispersion of the white agricultural labourers is clearly visible. Some of them have been attracted to San Paolo by the higher wages paid there, and still more by the fascination which a compact settlement of Italians will exercise upon scattered individuals. Others have settled in the colonial centres which have been founded by the Government of Minas since it has ceased subsidising immigration. Some are employed in the gold or manganese mines; but the majority have swelled the urban population of the State, and are to-day artisans or small shopkeepers at Juiz de Fora, Barbacena, or São João del Rey.

The gaps which the Italians have left in the plantations have been gradually refilled by the negroes.

Since the abolition the black agricultural population has acquired new habits; its dwellings are now scattered. The negro habitations, in which they live with a lack of comfort which is equalled only by the scantiness of their needs, are scattered all over the area of the *fazendas*, distributed at hazard, in the neighbourhood of the springs or along the roads. As for the dependencies of *fazenda*, where the slaves used formerly to pass the night, they are deserted and falling into ruin, where they have not been transformed into barns or piggeries. By

a significant contrast the daily movement which animates the *fazenda* is precisely the reverse of that to be noted in San Paolo. In San Paolo the white colonists, living grouped in the colony, under the supervision of the *fazendeiro*, scatter each morning through the *fazenda*. The *fazendeiro* is present to see them off, just as he sees them return in the evening. In Minas, on the contrary, the negroes live scattered over the estate, far from the master's eyes, and assemble when they please at the *fazenda*, where the master waits for them, often in vain, to commence the day's work. In the evening they disperse once more. This fact alone is enough to reveal the contrast between the discipline of the *fazenda* of San Paolo and the disorder of the Minas plantation.

While in San Paolo each colonist works alone, the *fazendeiro* confining himself to an occasional inspection of the trees confided to him, it is impossible in Minas to obtain a constant effort from the negroes unless the supervision is incessant. They are therefore organised in gangs, with a foreman or overseer to each gang. Except that they carry no whip, these overseers are what the guards were in times of slavery.

One may well suppose that the negroes of Minas are not made parties to a form of contract like that in use in San Paolo, by which each colonist is made responsible for a portion of the trees on the *fazenda*. It is only rarely that the planter can grant a negro an allotment as a *métayer*. Nearly all the negroes are day-labourers. Such is the present condition of the population freed from slavery. The average wages may be estimated at half-a-crown. Such a sum is manifestly superior to the needs of the negro ; moreover, it does not result in regular labour. A good worker will work three days a week. A planter may reckon that although three hundred negroes of an age to labour live on his plantation,

he will probably be unable to recruit more than a hundred every morning. The fact that a negro inhabits quarters belonging to a certain planter does not in practice bind the negro to offer his services to the planter every day; at most he is forbidden to hire himself to a neighbouring planter. But he has the avowed right—a right difficult to discuss, considering the power of passive resistance with which the negro is endowed—of taking, during the week, as many days' rest as he pleases. And the negro is indolent; work inspires him with a profound horror; he will allow himself to be driven to it only by hunger or by thirst; when all other resources fail him, then only he presents himself at the morning roll-call and offers his services.

Another consequence of abolition is the ease with which negroes pass from one *fazenda* to another. In default of corporal punishment, which disappeared with slavery, the last resource of the planter against the negro who commits some grave infraction of the rules of the *fazenda* is to exclude him from the estate. The negro then seeks to engage himself to a neighbouring *fazendeiro*. Sometimes he decides to do so of his own accord, when he disappears without warning, leaving his hut empty. However disencouraging his appearance, he is sure of finding a welcome everywhere. The *fazendeiros* gladly accept the advent of another worker, without inquiring into his origin. Twenty-five years ago they showed more solidarity; they used then to restore one another's truant slaves. To-day the *fazendeiro* will indicate some empty hut, and the new hand will re-establish himself without any large expenditure; the wardrobe of the negro is as simple as his furnishings.

The poor quality of this negro labour is a heavy burden upon the agriculture of Minas. The coffee-trees do not last as long in Minas as in San Paolo. At an age

which would find them in full bearing in San Paolo they will in Minas have already ceased to produce, and have to be abandoned. One must have visited a few of the Minas plantations before one can realise precisely what advantage the San Paolo planters have derived from the free immigration of European labourers. That small ownership shows signs to-day of establishment in southern Minas, and that it has a better chance of finding a home there than in San Paolo, is due, above all, to the fact that the large plantations employ none but black labour.

Even more than the State of Minas, the sugar plantations of the Atlantic coast were essentially the home of slave-labour. Since the abolition the black labourers occupied in the cultivation of the sugar-cane have never known white competitors. European immigration has never set in towards the sugar districts.

Abolition did not suspend production there as it did in Minas. Powerful interests compelled the planters to continue to exploit their fields. The sugar factories represented a capital which could not be allowed to remain idle. They must at any price be kept at work. The large landowners accordingly employed the greatest energy to restore among the black population the discipline endangered by abolition.

As in Minas, the negroes scattered, leaving the common lodging where they had lived grouped round the master's house. Abolition had also another consequence: the women ceased to work. All that is ephemeral and uncertain in the constitution of the negro family favoured their idleness. The negro has still to buy the fidelity of his companion by shifts unknown to men of white race, who live in countries where the conjugal tie is better guaranteed by custom and the law.

With these alterations work was resumed in the cane-

fields as before the abolition of slavery. The land, more often than not, belongs to the sugar factories. They grant the negroes allotments, and issue a form of contract known as a colonial contract, although the result does not resemble the "colonial" existence of the Paulista labourer. The irregularity of black labour is all the more dangerous in the sugar districts because a stoppage of the factories would be ruinous. Each factory, consequently, does its utmost to ensure a harvest. The contract obliges the worker to deliver all his canes to the mill.

The manufacturer subjects the workers to a constant supervision ; for their own interests are not sufficient to keep them steadily at work. Nurseries of cane are maintained and plantation is encouraged ; but sometimes the factory is reduced to getting the work partly done at its own expense. Many negroes accordingly work by the day. The day's labour, as in Minas, is worth from 2s. 3d. to 2s. 6d. Sometimes the colonist is an actual contractor, who receives from the factory a large tract of cane, on which he employs day-labourers ; then the work gains in regularity, and the factory may be sure of its crop. In this case the colonist has to solve the problem of keeping his staff complete during the whole period of field work.¹

¹ The question of labour is not the only one that concerns the Brazilian sugar industry. It is subject, indeed, to very curious economic conditions. A number of factories around Campos and Pernambuco make sugar properly so called. Their products are absorbed by the large Brazilian cities. But in addition to these factories there are all over Brazil an infinity of small and primitive crushing mills which produce a substitute for sugar—a concentrated syrup. They sell this in the country district, where their customers are not very exacting. The output of these mills is intermittent. They stop working when the price of sugar falls ; when it rises they resume operations. The competition which they oppose to the great sugar factories is extremely harmful to the latter, which lose part of the national market ; and the higher the price of sugar the more serious is the rivalry.

The cane which the colonist brings in is paid for according to the market price. Sometimes the factory receives a small proportion of the harvest—say a tenth—free of charge. This portion constitutes the only rent for the land. The value of the land cannot rise until all the land is under cultivation every year. At certain points, however, the high value of the land indicates that it is under constant cultivation. In the neighbourhood of Campos, too, the land is sold for as high a price as 15s. per acre, and sometimes more.

A small proportion of the land belongs to negroes. Small ownership among the negroes dates from before the abolition of slavery. The masters who freed slaves often gave them, with their liberty, a piece of land to ensure their subsistence. The negroes who have inherited these small holdings are to-day the best element of the black agricultural population. They form the majority of a class of peasant proprietors, tilling their land with their own hands, which also comprises mulattoes and even a few whites. This class is unfortunately too restricted.

Taking them all in all, the negroes in the sugar-producing regions like Minas form a type of labourer of very indifferent economic value. The very sun assures them of many alimentary products, obtained without agricultural labour. Fish swarm in the marshes of the coast. A child will catch in one day enough to feed ten men. The fish, indeed, save the blacks from the obligation of regular labour. Although by no means the whole of the soil is under cultivation, certain sugar-producing districts are thus able to support a population of extraordinary density, swarming like ants in an ant-hill.

In Bahia the sugar plantations have entirely disappeared. In Pernambuco the majority of the negroes



SUGAR-CANE.



live, as formerly, on the plantations. A large number, however, have crowded into the towns; for the negroes, who, in order to show their independence, have scattered far from the *fazendas* on which they used to live, none the less hate solitude, and are very eager for an urban life. In Pernambuco and Bahia the urban population is too large for the business capacity of the cities and the activity of the harbours. Around the cities properly so called stretch immense suburbs, vast villages where the negroes live, without very appreciable resources, among the mango and bread-fruit trees. It is amazing, on crossing a *fazenda* in Minas, or a Campos plantation, to see the number of negroes who can lodge and feed themselves on a minimum quantity of work. One feels the same astonishment in the large villages of the north. If you desire a boat, twenty boatmen dispute your custom. In Pernambuco market I remember having seen twenty merchants who had between them a stock of fruit which could have been carried in two baskets.

To sum up: the moral and economic inferiority of the negro populations of Brazil is incontestable. The puerility of the negroes is extreme. They have no foresight, and are innocent of any form of ambition, the sole motive-power of progress. They are modest in their desires and easily satisfied. Whoever has heard, in the streets of Bahia, the sincere, sonorous, joyful laughter of some negro woman cannot fail to have experienced the mixture of contempt, indulgence, and envy with which this nation of children inspires the Caucasian. Their imagination is strong and nimble; their sentimental life active; intellectual life they have none. They are superstitious, and their devotion has supported and still supports the four hundred churches of Bahia.

They amuse themselves with ardour. More than half

their life is devoted to amusements and festivals. The circus is their favourite amusement. The wit of the clown keeps them happy for hours. Some of their festivals are connected with their agricultural labours. They were formerly celebrated on the *fazenda* by the slaves ; they have survived slavery. In Minas the black workers still come, when the coffee harvest is over, bearing in their hands boughs of the coffee-tree, which they ornament with multi-coloured ribbons of paper, shouting for the master to give the signal for the rejoicings to commence.

But besides these general festivals, each family has its own ; the least occasion suffices. Immediately leaves and branches are hung at the door of the hut. The host and those invited are possessed by a demon of uproarious excitement. How often, while travelling on horseback, have I surprised these infernal scenes, which are in no way disturbed or interrupted by the passage of a stranger, and have been pursued along the track by raucous shouts and the discordant sounds of barbarous music !

It is during these festivals that the negro dances are performed : the *Coco* and the *Samba*. They are enlivened by peculiar songs, often in dialogue, sung by two dancers ; veritable primitive comedies, some with unintelligible words, probably corrupted remains of African tongues. Many of the *Modinhas* which are to-day sung around Bahia and Pernambuco have been composed by city rhymesters, and are only more or less skilful imitations of the primitive songs of popular origin. But the old *motifs* which date from the time of slavery have more character. They recall the various occupations in which the black populations of the north of Brazil were formerly employed. Such a song as this used to be sung in the districts of the cane-mills :—

*O Lele, turn the mill,
 O Lele, mill has turned.
 When you have no shirt
 Why wish for an overcoat?
 And long live Joe Nabuco and all his gang,
 And the Knight of the Holy Ghost and the liberal party!*

Near the coast the sea finds its place in the songs :—

*My sail, my little sail,
 What wind would you like to fill you?
 The land wind by day,
 The sea breeze by night.*

Dance and song keep up the mirth, but it is the sugar "brandy" that creates it. Intemperance is indeed the vice of the black people. Alcohol is its first and almost its only need. The negro works only to buy spirits ; and it is by generous distributions of spirits that the *fazendeiro* maintains the fidelity of his workers. I have been present at such a distribution ; I received an impression of real terror at the sight of the quantity of alcohol absorbed by the adults and even by the children. Sugar-spirit is sold in Brazil at a very low price ; a day's wages will buy a week of drunkenness. "What," says the song,—

*"What has become of your partner?
 The mountain water took him!
 It was not the water—that was nothing :
 It was the cachaça¹ brandy that slew him."*

Alcoholism is not the only plague of the negro population. It is the prey of other maladies which are bred by the utter lack of hygiene ; and the race does not increase as its extreme fecundity would lead one to

¹ *Cachaça*, the alcohol made from sugar-cane : rum.

expect. It would be an exaggeration to predict its future extinction ; but it is probable that it will not increase in such a degree as to keep pace with the other elements of the Brazilian population. Its importance as a factor of national life can only decrease ; it will never exert a decisive influence on the destinies of the country.

CHAPTER XIV

CEARÁ

The climate of Ceará—The droughts—The Ceará race and its fecundity—Stock-raising—The *vaqueiros* of Ceará—The *mora-dores* and their food-crops—Disappearance of the sugar-cane—The agricultural population of the *serras*—The *serras* and the rainfall—Periodic migration in the region of the *serras*.

WHILE the population of southern Brazil was replenished in the nineteenth century by means of European immigration, the provinces of equatorial Brazil received very few immigrants from Europe. The negroes are to be found in strength no further north than the Parahyba, the limit of the great cane-fields ; beyond this limit the half-breed population is predominant, the descendants of the early Portuguese colonists and the indigenous races of Indians.

The cradle of this population, the centre in which its density is at present greatest, is Ceará. In Europe little is known of northern Brazil beyond Bahia, Pernambuco, and the basin of the Amazon ; yet between the sugar States and the rubber States is a third region ; less known, for its economic development has been extremely slow ; less often visited, for it lies out of the range of all the highways—the region known as Ceará. Ceará occupies the northern portion of the plateau of the Borburema, which covers the north-eastern angle of Brazil, and ends in a gentle slope towards the Atlantic.

It extends as far south as the edge of the basin of the San Francisco, and as far east as the edge of the basin of the Parahyba. Its general slope is from south to north. On the west the almost continuous heights of the Serra Grande and the Serra d' Araripe separate it from Piauhy. From the surface of the plateau irregular ranges rise to a height of many hundred feet. Of these the two most important are the Serra de Baturite and the Serra do Sobral.

Ceará is peculiar by reason of its climate ; it is a land of droughts, and suffers terribly from the lack of water. In the absence of sufficient observations we can give no scientific account of the climate of Ceará. The average annual rainfall at Fortaleza, from 1849 to 1898, was over 54 inches. In the interior it is not so high. The water, flowing over an impermeable soil, is exposed to an intense evaporation, for the thermometer ranges all the year between 77° and 95° Fahrenheit, and the plateau is swept by hot, absorbent winds. The hydrographic system is embryonic ; there are no rivers in the usual sense of the word ; only intermittent torrents, whose sandy beds commence in every hollow of the hills ; full in the rainy season, they dry up directly the dry season commences.

The rains are not equally distributed throughout the year. As a rule the rainy season begins in January. The rain takes the form of local showers, great rain-storms by which a canton profits, while the neighbouring cantons are not affected. The rains last until June. Thenceforward the skies are pitilessly clear. Nothing mitigates the heat ; the dry season, having once set in, lasts for six months or longer. Whosoever has lived in a country where a dry season alternates with a rainy season will remember the feverish, restless longing for the first rains, and the joy they bring to man and beast. But nowhere are the rains awaited with greater restlessness than in

Ceará, where even the stranger is affected by the universal anxiety. This prevalent anxiety is due to the fact that the winter months occasionally fail to bring the rains. When the rainy season does fail the country is doomed to a year of wretchedness ; the plague of drought invades the land.

Few countries present such variations in their rainy seasons ; and to make things worse the years of drought come in groups, so that the droughts of historic severity have lasted for several years. The first since the Portuguese occupation occurred in 1692. Others lasted from 1722 to 1727, from 1791 to 1793 ; in the nineteenth century there was a great drought in 1845, and one which lasted from 1877 to 1879.

The extent of these droughts has varied. The drought of 1791 to 1793 was far-reaching, and was felt throughout the basin of the San Francisco.

As to their causes : these remain as obscure as are all the meteorological conditions of Ceará. Such evidence as I have collected which bears upon the subject has been hesitating and contradictory. It would seem that the rain is not brought by the ocean winds ; these retain their character as dry winds for the whole six months during which their incessant squalls dash the waves against the inhospitable coast. The rains, on the contrary, come in still weather, after thunderstorms ; the rainy season, with its maximum occurring in March, corresponds with the time when Ceará enters the zone of equatorial calms.¹

¹ The process by which these rains form is probably as follows : The plateau being high and extremely hot, a continual displacement of hot air would take place upwards ; this air would be replaced by a gentle movement inwards, from the surrounding country, of air heavily charged with moisture—this draught commencing at sunrise, when the night mists of the valleys would slowly become invisible vapour ; during the day evaporation in the surrounding regions

The prevailing opinion is that the dryness of Ceará is due to its deforestation. Man, according to this explanation, is but the victim of his lack of foresight; in destroying the forest he ruins the climate.¹ This belief dates very far back, and each generation has held it. We find it expressed in 1713 in a book written by Euclides da Cunha. Again, after the drought of 1791-1793 the Government appointed by letters patent a judge-conservator of the forests, who was instructed to "restrain the indiscreet and immoderate desires of the inhabitants, who have by steel and by fire destroyed the precious forests that formerly abounded." After the drought of 1879 it was again asserted that the increasing scarcity of rain was due to the extreme deforestation which had been provoked by the increasing cultivation of cotton.

Personally, I do not believe this theory. Although it is true, both for the north and the south of Brazil, that

would keep up the supply of vapour. Ceará would therefore be gradually covered, during the day, with a pool of air containing vapour in suspension, superimposed upon rising eddies of dry air and covered by a column of dry air. Between these strata, of different provenance, and containing different quantities of vapour, great differences of potential would arise. This potential would result in the attraction and condensation of water vapour upon fine dust particles—that is, in the formation of clouds. The difference of potential increasing, the condensed drops would become larger until a thunderstorm, by destroying the difference of potential, would also destroy the cohesion of the large drops, which would accordingly fall. The phenomenon of daily rains after daily thunderstorms is well known in tropical countries where conditions obtain such as those described, or in large mountainous islands within the tropics.—[TRANS.]

¹ The condensation of vapour upon the leaves of trees during the night in districts where the night temperatures are greatly below those of the day is often equivalent to a fairly heavy shower. Trees also check evaporation; especially those of a dark, tropical forest; they also radiate little of the heat they receive, so that winds passing over forest countries do not become heated.—[TRANS.]

the history of the occupation of the soil is also that of the duel between man and the forest, Ceará has more than any other province stood outside this struggle. To have been deforested it must once have been a land of forests; and as early as the seventeenth century the country has been covered with "bush," not with forest. This bush, which after a fire attains its former growth far more quickly than a forest, cannot exercise much influence on the climate. Man is not responsible for the drought of Ceará; and the climate has not been modified during the historic period.

The mark which the droughts have left upon the country is visible as soon as one reaches it. A long line of sandhills, bare and yellow, dazzling under the sunshine, borders the resplendent sea. The little city of Fortaleza is hidden behind the dunes, surrounded by an oasis of coco-palms; and on the skirts of the city, which is of European type, a primitive population shelters itself in huts among the palms; a tatterdemalion, dirty population, whose appearance reveals the worst result of drought—extreme poverty.

The dominant race element is Indian. The primitive inhabitants of the country have not, as elsewhere, been eliminated by the white and black races, or driven into the interior, but have mingled with the new-comers. The long struggles between Portuguese, French, and Dutch, which forced the conquerors to accept and to seek the alliance of the indigenous peoples, and the very slowness with which these provinces have progressed, have resulted in an extraordinary mixture, in which the dominant characteristics are nearly always, especially among the rural population, the bronze complexion, the black hair, and the flattish features of the Indian. On the roads of Ceará one occasionally meets faces which are positively Asiatic in type. How is it that these

people have retained the physical characteristics of the Indian, but have not inherited his moral qualities ?^{*} They are accused of frivolity and imprudence : serious faults in that uncertain climate, where every one should be prepared beforehand for the bad years.

If the climate of Ceará is not prodigal of rain it is at least healthy. The population multiplies with unexampled rapidity. The fertility of the women of Ceará is proverbial, even in Brazil, where examples of fertility are not to seek. In this respect Ceará is very different from the exuberant plains of the Amazon, where human life is exposed to a thousand maladies, and perpetuates itself but feebly amid the splendours of the vegetation.

The interior of the country is suited to stock-raising, and was peopled by Portuguese colonists long before the coast was. Such towns as Crato, Sobral, and Quixé Ramobim are centres of some antiquity.

Even to-day most of the population lives by its herds of cattle. Cattle-breeding was formerly and still is the industry of the greater part of the Brazilian provinces. It is practised throughout the country, but in Ceará the drought has given it peculiar characteristics, the climate reacting upon human existence in a thousand ways.

Imagine the surface of the plateau covered with a thick bush ; here and there open to the sun, and there the grass grows freely ; but the pasturage more usually consists of a dense, stunted thicket. The seasons profoundly modify its aspect ; at the first rains there is a disorderly outbreak of vegetation ; something like the hasty, magical spring of the Arctic regions. And here, as in those regions, the time of vegetation is short ; soon, when the dry heats of summer come, all growth ceases. But for the time being

^{*} The tropical Indian is always inferior to the Indian of temperate climates.—[TRANS.]

Ceará is the loveliest country in the world. The rain itself, in this land where cold is unknown, is kindly, and one feels it fall with pleasure. "When the months of *fêtes* are over," says a popular song—"when January nears—then folk begin to listen, each hoping to hear the first growling of the thunder. . . . Nowhere is life so gladdened—as ours in the bush—when the year gives a goodly winter, and the thunder rumbles in the sky."

The rains, according to the year, cease in May or June. From that time the world is transformed; the leaves fall; it is not the long, the interminable autumn of France, but the sudden appearance of winter amid the flourishing thickets. But over this landscape, which recalls the December or January of the north, there hangs an atmosphere like the breath of a furnace; the grass shrivels underfoot, and life stands still. The *sertaon* retains its desolate appearance until the rains return. When they are late certain mimosas, whose roots are deep in the soil, outrun the spring, clothing themselves, amid the dead thickets, with a light foliage. The other plants awaken more slowly.

Stock-raising, in ordinary seasons, requires but little labour. The herd increases in freedom, seeking its food in the bush. During the whole winter fodder is abundant, and all the streams are flowing. The cattle lead an easy life; at this season the cows calve and yield their milk. Sometimes they are confined, in order to profit by their milk; when each *fazenda* becomes a little rural cheese-factory. Those cattle intended for the butcher grow fat at pasture. When the rains have ceased, from July to January, the cattle are left to themselves even more completely than before. No one has any fodder in reserve; the beasts browse upon the dry grasses, and even upon the leaves which have fallen to the ground and are kept from rotting by the sun.

Their owners trust to the instinct of their cattle to find out portions of the plateau where some local shower, or perhaps the nature of the soil, will afford them a slightly less wretched pasture. Transhumation, in the true sense of the word, is impossible. The hills whose soil is moist, to which the herds might be driven to spare them the rigours of the dry season, are covered with fields and plantations, and no available space is left for the summering of the herds; all pasture has been taken up. I was told, as of an unique example of transhumation, that one herd travels thirty miles each year, at the break of the season, to find more favourable pasture. The cattle make the journey of their own accord, unattended by herders; and of their own accord they return to the *sertaon* when the first rains fall.

At the beginning of the summer, so long as the pools last at which the cattle drink, the stockman remains unoccupied. When the sun has dried them up it becomes necessary to obtain water for the cattle, which are already growing thin. This is the season of digging wells; for there are hardly any permanent wells, used by generation after generation. Temporary wells are dug in the beds of the rivers, whose apparent flow has ceased. These are shallow holes, which have incessantly to be cleared; in the winter they soon fill up and disappear, but if the summer is a long one the question arises of providing food as well as drink; for the pasture gives out. It is replaced by the leaves of those mimosas whose foliage precedes the rains. Every morning the animals receive their rations of fodder. This is an easy matter; accustomed to man, who so often comes to their assistance, these cattle are far less savage than those of Rio Grande, and are easily approached. Neither the bolas nor the lasso is employed in Ceará; these are implements of the chase which are necessary only in regions where

the cattle have remained or become practically wild animals.

As a rule the owner of a cattle ranch or *fazenda* does not manage it in person ; the work is entrusted to a sort of bailiff or foreman, the *vacqueiro*, or cow-man. The *vacqueiros* are the true masters of the *sertaon*. Like the Guachos of Rio Grande, they live in the saddle. Clad in leather as a protection against the thorns, they scour the scrub in search of strayed cattle. The cattle wander at will from one property to another. From time to time the rancher or *vacqueiro* visits his neighbours, and, according to the consecrated expression, "asks for the field" ; that is, the right to search for such of his animals as have joined other herds. They are distinguished by their brands—letters or hieroglyphics branded with a hot iron. The branding of the calves is an important festival in the *sertaon*, as in most primitive cattle countries.

At the age of four the bullocks are ready for the market. They are separated from the rest of the herd and driven to the fair. A large number of fairs are held in the *sertaon* ; the stockmen meet there and exchange news. Cattle are sold all the year round ; but the cattle of Ceará are not destined to make salt meat, as are those of southern Brazil. It is true that history informs us that during the eighteenth century the *Xarqueadas* of Ceará used to export their products to all parts of Brazil ; but the drought of 1791-93, which destroyed the cattle, interrupted this trade, and it has never since been resumed.¹ The sale of the cattle is thus not limited to any one season, but has to supply the constant needs of the State.

¹ The condition indispensable to the dried meat industry is that of a dry summer following a season during which the animals can be fattened. This condition is fulfilled at the two extremities of Brazil—in Rio Grande and Ceará.

The cattle are not killed in the *sertaon* itself. The population is too scattered; it could never deal with such a quantity of fresh meat; moreover, its staple diet is milk. The cattle of the *sertaon* are sold on the *serra*, where the population is denser. It is a strange thing that the people of the *sertaon*, which is a cattle country, do not eat meat; while in the *serra*, an agricultural country where cattle-breeding is unknown, the consumption of meat is general. Of the cattle sent to the fairs or markets of Baturite, which are the most important of all, a third serves to feed the capital, another third is driven across the highways of the plateau to the port of Camocim, whence it is shipped to Para, and a third is sent to the *serra* of Baturite. The *serras*, the provinces of the Amazon, and Fortaleza—these are the principal markets to which the stock-breeders sell their herds.

Acre for acre, the *sertaon* of Ceará supports a much smaller number of animals than the prairies of Rio Grande. The bovine population varies to an astonishing degree; it increases rapidly during the normal years, but the years of drought almost annihilate it. After 1793 the cattle were absolutely swept away, and it became necessary to buy new animals in Piahy. It was the same after the drought of 1877-79. These disasters are not caused directly either by hunger or thirst, but by epizootic diseases, which irresistibly propagate themselves among the enfeebled animals. The capital which a herd of cattle represents is formed little by little, to be destroyed in a moment. The value of the soil is also always changing.

The influence of the droughts is visible not only in customs, but in the law. The value of the soil being so uncertain, inheritances remain undivided. Each joint proprietor, whatever may be the importance of his share, may undertake upon it the breeding of cattle on his own

account. One even comes across people who have no rights in the soil, yet pasture their herds upon it. No rule or custom regulates the number of cattle which each breeder may possess or graze. One may imagine what quarrels would arise if the pastoral capacity of the bush were ever attained ; but a drought, by reducing the herds, has always come in time to prevent such a condition. Property in water is no better regulated. This is because there are nowhere permanent sources of water. The temporary wells, re-established each year, may be used by all who have helped to dig them. The irregularity of the climate is thus reproduced in the social organisation, in the incomplete development of property.

Only by enclosing properties could the conditions of life in the *sertaon* be altered. A few attempts have been made. For this purpose was employed not wire, as in the Argentine, but a kind of hurdle, the materials for which are abundant in the bush ; the pastures are enclosed by branches interlaced between upright posts which are driven into the ground. One may imagine the universal maledictions aroused by the innovator who encloses his land because he wishes to make a larger profit out of it. The price of enclosed land rises instantaneously. Not only do such enclosures mean a rapid increase of profits ; they are also putting an end to the old system under which the proprietor did not profit by his own land, while "landed property" was only a phrase.

Although the *sertaon* is above all a cattle country, yet cattle-breeding demands the cultivation of food-crops. Each *fazenda* must also be a little agricultural centre, a kind of general farm. This is essential owing to the difficulties of transport. The highways of Ceará are no better than the average of Brazilian roads. Moreover, transport is interrupted by drought, since the mule

convoys cannot travel unless certain of water and fodder at each stage of the journey.

In the matter of cereals—and the Brazilian uses the term to include all staple food-crops, including manioc, maize, &c.—each family must grow enough for its own consumption, as no cereal trade exists. As a result the population lives upon its annual crops and possesses no reserves. If the harvest fails famine appears. Only commerce, with capital at its disposal, could create a stock of cereals. In France, in the eighteenth century, the people used to accuse the wheat trade of causing famines. In reality only trade can avert famine.

The cultivation of alimentary products falls to the care of the rural lower classes. In addition to the *vacqueiro*, the steward or foreman of the estate, there are a number of other workers; these are known in the *sertaon* as the *moradores*, the “inhabitants”; a term of which the original meaning is extremely uncertain. They live on the estates, but never own land of their own. Their homes are primitive huts, which the owners allow them to occupy, or which they themselves construct, of boughs covered with palm-leaves. As a rule, they live on the same property from generation to generation, while the same family of *vacqueiros* manages the ranch for the proprietors. We must not judge of their condition according to European ideas; their relations with the proprietor are not exclusively those of employer and servant. The proprietor is in a sense their protector, their political patron, and they repay him by their fidelity and devotion.

Custom has settled the respective rights and duties of the proprietor and the *moradores*. They do not pay the rent of their land in money; we can hardly say that they pay it in services, for when the foreman employs them he pays them by the day. The profit of the proprietor really consists in the fact that their presence means

that he can easily recruit labourers when he requires them.

The *moradores* occupy their fields only until their crops are harvested.

At that time of year when the herds require attention—whether to drive them to market, or to dig the wells to water them, or collect the mimosa boughs that serve as fodder, the *moradores* help the *vacqueiro* in the work of the *fazenda*. When they are once more free, many of them gather the *cire de carnauba*, a wax extracted from the leaf of a palm which grows abundantly in the wild state. Dried and beaten, the leaf yields a powder which is collected and melted. Local industry employs this product in making candles with cotton wicks. Unhappy is the traveller who waits for the evening in order to arrange his notes of the day, and who can procure no other source of light! The *moradores* who work at this industry give the proprietor half the produce. But during the rainy season their chief occupation is the cultivation of their various food-crops. Their methods are practically the same as those of the native populations throughout Brazil. They cut down the trees in the bush, and when the trunks have sufficiently lost their sap they set fire to them one day when the wind is favourable, and so prepare the soil for cultivation. Seed is sown in holes made with a hoe, between the carbonised trunks and boughs. The day when the bush is cut down, in the month of October, is the day of hardest labour; but it is also made a day of rejoicing, for the *moradores* collect in their strength; aided by their neighbours, the work is at last accomplished; not in solitary silence, but in a state of uproarious excitement. The bush cut down, they disperse, and each burns his own field unaided, weeds it, and harvests it. This form of cultivation is known as *la roça*, the word denoting both the work of preparation and the field itself.

Although the methods of cultivation in the *sertaon* of Ceará are very much the same as are those employed in other parts of Brazil, the cares and anxieties of agricultural life during the winter months are peculiar to the country. Without rain no harvest will follow ; but if the rain falls out of season the results are sometimes even more hopeless. If the cattle-breeder waits impatiently for the rains which will awaken the pastures, what are the feelings of the cultivator whose seed is underground ? Whether the rains arrive in January, February, or March, the pasture is always ready to revive ; but the crops of the *moradores* are more exacting. The long droughts which annihilate the herds are of rare occurrence ; but how often the sown field remains barren ! The first rains of January often awaken hopes of a favourable summer, and the fields are immediately sown. The rains are interrupted ; the seeds, which have already germinated, shrivel and are destroyed ; not one will escape. The *moradores* are still contented if the rains set in once more, so that they can sow the fields afresh. These double sowings are almost the rule in Ceará.

Except in the immediate neighbourhood of the towns, and in the humid regions at the foot of the *serras*, the agriculture of the *sertaon* is confined almost entirely to the cultivation of these food-crops.

A glance at the history of Ceará will shows us that the country once knew a period of more intense agricultural life. Two crops were raised there of great economic importance : sugar-cane and cotton.

The cultivation of the sugar-cane was rapidly extended after 1845, and continued to develop until the year 1862, or thereabouts. The sugar-cane *fazendas* were only of small size ; they possessed primitive crushing mills ; but even these were too costly for the rural labourers ever to

dream of growing sugar on their own account. A series of small earthen reservoirs—now ruined by the white ants—used to dam the ravines, and the water was utilised with the greatest care. Sugar was never manufactured in Ceará, only *rapadura*, a kind of concentrated syrup,¹ which still forms part of the diet of the people of the *sertaon*, and especially “cane brandy,” or, more strictly speaking, rum.

The ranchers of the *sertaon* possessed only a limited number of slaves; slave-labour was ill-fitted for the irregular tasks of cattle-breeding. On the other hand, the free labourers formed only a small proportion of the staff of the cane plantations. All over Brazil the cultivation of the sugar-cane has been connected with slave-labour, and in Ceará the decadence of the sugar industry hastened the end of slavery.

As early as 1875, before the drought, the decay of the sugar industry was everywhere visible. The drought struck the final blow. The decay of the sugar industry was the signal for a rapid fall in the market value of slaves. At the same time the provinces of the south, which were then nearing the height of their development, could not obtain sufficient labour, and while recruiting the first white emigrants, they made a last effort to renew their staff of slaves. There was thus a heavy exportation of slaves from the north to the south; and Ceará was among those regions which furnished the greatest number. The exportation of slaves, like the decadence of the sugar industry, had commenced before the drought, but the drought accelerated the movement. In 1877 Ceará exported 1,725 slaves; in 1878, 2,909; in 1879, 1,925; or in three years more than 6,500 slaves, about a fifth of those owned in the entire State. As has often happened, the institution of slavery, made less harsh by

¹ Sold in rough cakes or tablets.—[TRANS.]

custom, did not arouse public opinion ; but the spectacle of a commerce in slaves did violently arouse it. The departure of these human cargoes for the south was regarded with indignation. The motto of the abolitionists was significant : they cried not only "Down with slavery !" but also "No more slaves to be shipped from the harbour of Ceará !" They succeeded in rendering such shipments impossible ; a fortunate piece of tactics since, as soon as exportation was made impossible, the value of the slaves, for whom there was no longer employment in Ceará, rapidly decreased. Scarcely thirty thousand remained in the State. When their enfranchisement was determined upon it was possible to buy them out at reduced prices ; less on account of the violent propaganda of the abolitionists, and the terror they had caused by such means, than because the sugar plantations had disappeared. In 1884 the province pronounced the general abolition of slavery throughout its territory. Thus Ceará was four years in advance of the rest of Brazil.

The cotton industry has a history very different from that of the sugar industry. The climate of Ceará was well adapted to the cultivation of cotton. At the time of the War of Secession there was a cotton fever ; the brush was cleared in all directions ; but the cotton, unlike the cane, was cultivated by the *moradores* themselves, and not by the large landowners. The cotton was sold in the raw state, and the trade was gradually gathered into the hands of a few commercial houses which exported it, yielding the *moradores* a small monetary profit ; this made them independent, and it was no longer necessary for them to hire themselves to the proprietors. To-day cotton is still cultivated here and there in the more accessible parts of the *sertaon*, and is still exported ; and it is still grown on the small scale. While the cultivation of the sugar-cane employs a truly agricultural labouring population,

the planters of cotton, who are kept busy by their fields only for a few days, are able to breed cattle as well. Consequently the raising of stock, in the manner necessitated by the climate, is at present the dominant and determining factor in the lives of the inhabitants of the whole of the *sertaon* of Ceará.

To the stranger this life will at first appear poverty-stricken and wretched. Yet it exercises a fascination on all those who know it. It is full of liberty ; it is not monotonous ; and the hours of physical fatigue are followed by long days of indolence. It forms a population both able to endure hardship and to enjoy idleness. As well as its traditional forms of labour it has its amusements, wholly of popular origin, which have undoubtedly been transmitted from generation to generation since the time when the first herdsmen settled in the centre of Ceará. The most original of these amusements is that known as *bumba meu boi*. This is a species of comedy which reminds one of the ancient drama, or rather of a simple masquerade. In this the bullock plays the part that might be expected in a cattle-breeding country. The characters vary little. There is the *vacqueiro* who leads the bullock, Matthew, Gregory, the old woman, the doctor, and the apothecary whose duty it is to give the bullock the clyster which is to set the animal on his legs again, and the child, whose head is to serve as syringe for the operation. As for the bullock, the centre of action, around whom the rest of the players revolve, he is represented by a kind of wooden armour, covered with leather, which is worn by one of the players. He runs through the village streets pursued by shouts of laughter.

These *fêtes* are celebrated during the first half of January ; usually the day before the " Day of Kings." If the year is normal, this is the time when the rains are

heralded by the first showers, and there is gaiety everywhere.

In other portions of Ceará life is utterly different to the life of the *sertaon*. I regretted that I was unable to visit the Cariry. This is the name of a small district at the southern extremity of the State, at the foot of the Serra d' Araripe. This range is exceptional in that it is formed by permeable rocks, and restores, in the shape of perennial springs, the rains which its flanks absorb. The Cariry lives by these springs. It escapes the ravages of drought, is able to cultivate permanent crops, and practises methodical irrigation. The land is valuable, on account of the available quantity of water, the distribution of which is supervised by the municipality. Communication is more easily effected with the neighbouring portions of the *sertaon* of Pernambuco and of Piauhý than with the north of Ceará. Hitherto the Cariry has had no relations with Ceará.

It is quite different with the mountain regions which are scattered over the *sertaon*. The two most important ranges, the Serra de Baturite and the Serra do Sobral, are situated at equal distances from the sea, and their distant crests may be seen from the coast. They are not merely isolated chains, but two little worlds in themselves, enclosing deep valleys. The *serras* transform the climate of the *sertaon*. By reason of their height they precipitate rain. Their rainy season is always more regular and the summers shorter and less trying; and the springs never fail. The difference of temperature between the plain and the mountain may be as great as 14° to 18° degrees.

I ascended the Serra de Baturite in the month of January. The *sertaon* still retained its desolate aspect; not a spot of green was visible. The first slopes of the mountain had suffered equally from the summer, and

bore only leafless thickets. As our horses, covered with sweat, scrambled up the stony trail, the horizon opened behind us, and we could see, behind the village, at the mouth of the dried watercourse by which the rains of the *serra* at times descend upon it, the scorched immensity of the plateau. Advancing, we gradually encountered signs of moisture. The watercourse, up which our trail led, showed once more a trickle of water. With the water living plants appeared ; at first they made a modest show, but further on they had sprung up in a riotous disorder. Not only did they fill the bed of the torrent, but scaled the slopes and crowned the ridges. A wonderful verdure rested our eyes, while our bodies rejoiced in a more refreshing temperature. The summit of the mountain bore a fragment of tropical forest, full of orchids and palms and trees of giant growth, always covered with foliage.

Vivid as is the natural contrast between the *sertaon* and the mountains, the difference between their respective populations is no less marked. The *sertaon* is a country of stock-breeders ; the mountains form a country of agriculturists. The contrast between agriculturists and stock-breeders, peasants and herdsmen, is one of the common characteristics of Brazilian rural life ; one finds it everywhere, from north to south, but nowhere is it so marked as in the *serras* and the *sertaon* of Ceara. Everything reminds one of it ; below, the cattle reign supreme, and the few crops are carefully fenced in ; in the mountains the fields are open, and the few head of cattle encountered are enclosed or tethered.

Between the *serra* and the *sertaon* there exist those economic relations which are usual between two neighbouring regions whose products are unlike. The people of the *serra* buy, kill, and eat the cattle of the *sertaon*, and sell its inhabitants the products of its fields, including

coffee and sugar. The *serra* is a rich agricultural region, and the sugar-cane covers the damper bottoms. When it disappeared from the *sertaon* it survived in the *serra*, thanks to the generous rainfall. The *fazendeiros* who own the sugar-plantations farm them by a kind of *métayage*.

As for coffee, this also is one of the alimentary products which the people of the *sertaon*, frugal as they are, are unable to do without. It is, one may say, their only luxury ; the supreme resource of hospitality ; for the native of Ceará will offer coffee to the stranger beneath his roof as the Guacho will offer *maté*. Coffee is grown nowhere in Ceará except, on the *serras*, which have a kind of monopoly in coffee as regards the interior of the State. Coffee occupies the slopes above the canes ; but the crops are unfortunately irregular. They even fail completely when the rains begin late, and the mountains have received no showers before December. The labourers employed in the cultivation and harvesting of coffee are sometimes paid by the day, but more often for piece-work. Cultivators of the sugar-cane and coffee, they form around the *fazendas* of the *serra* a denser population than is found on the *fazendas* of the *sertaon*.¹

Their wages would not be sufficient to keep them alive ; accordingly (as is the case on the *sertaon*) each *morador* has his field of manioc, which is given him, rent free, by the *fazendeiro*. Each grows what he pleases. There is no more trade in cereals on the *serra* than on the *sertaon* ; nor does such trade exist between the

¹ For some little time now plantations of *manicoba*, which yields an excellent rubber, have been established on the *serra*. Not only does this new crop increase the resources of Ceará ; it is also of the greatest social importance. The gathering of rubber in Ceará is effected under excellent sanitary conditions, while the men who collect it on the Amazon are exposed to mortal dangers.

sertaon and the *serra*; in both regions the growth of cereals and other food-crops is entirely a local matter.

But otherwise the difference between *serra* and *sertaon* is profound. While on the *sertaon* the drought, year after year, destroys the seed in the ground, on the *serra* drought is unknown. There the earth unfailingly rewards the labour of man, and famine has never climbed the heights. The result is that every drought provokes a stream of emigration from *sertaon* to *serra*. As it is not practicable to carry the food to the people of the *sertaon*, the inverse operation is practised; the population flows towards the land which is capable of supporting it. I have met with many examples of migration due to drought. The displacement of the population is usually progressive; those who have suffered move nearer to the *serra*, advancing at first as far as its lowest spurs, in the search for a moister soil. If the drought lasts yet another year, they decide to ascend to the summit of the *serra*, and establish themselves in turn in the forefront of the corn and coffee plantations. The attraction of the *serra* is nothing new; the inhabitants of the interior had already commenced to migrate thither after the great drought of 1722-1727, at the beginning of the colonial era.

If this movement upward were not compensated by an inverse movement, the *serra* would no longer be able to support its population. But not all of those newly-made mountain-folk became used to their new life. Regular work displeased them. They refused to conform with the ideas of the *fazendeiros* as to discipline. At heart they still longed for the life of the *sertaon*; the mountain winter seemed to them too rough—yet the thermometer has never, to my knowledge, fallen below 57°—and at the news that rains had fallen on their local thickets nothing could keep them from leaving the mountains, which lose and gain their population alternately.

But the number of immigrants has been greater than the number of emigrants. During the drought which lasted from 1877 to 1879 the migration to the mountains was particularly heavy. It was then that they really became peopled. The *fazendeiros* profited by the abundance of labour to extend their plantations of coffee and sugar. But the *serra* had to find nourishment for all these new-comers, and there was no room for their fields of manioc. Manioc was accordingly planted on the slopes between the rows of coffee-shrubs; or new clearings were made at the expense of the forest, which was cleared on every side. The agricultural revival was extremely marked. It is enough to explore the roads of the *serra* to be astonished by the number of dwellings.

Over-population, unhappily, has had serious consequences. The forests were a great protection to the mountains; they retained the soil upon the slopes, ensured the permanency of the springs, and reserved, for the months of drought, the waters received during the rainy season. After the destruction of the forests it seemed as though the droughts of the *serraon* were about to invade the mountains; the coffee harvest became more uncertain than ever, and the sugar suffered from lack of moisture in what had hitherto been the dampest hollows. At the same time the soil became exhausted, for it was cultivated without knowledge and was never manured; so that the yield of manioc was greatly reduced.

The whole mountainous region passed through a crisis from which the *fazendeiros* suffered as greatly as their labourers. They are seeking now to remedy matters; they have ceased to plant exhausting crops of cereals between the lines of the coffee-shrubs, and such crops are now protected from the sun by planting them in the shadow of great trees. The forest is being brought to

life again, afforestation being a far simpler problem under Brazilian skies than it is in Europe. It is enough to leave the soil fallow, and the forest returns : not the primitive forest, of which only a few traces are left on the slopes of the mountains, but a kind of giant bush, a thicket of luxuriant vegetation, which affords a most efficient shelter from the sun.

In the time of its agricultural prosperity the *serra* quickly grew rich. In those fortunate years the coffee harvest was followed by gigantic *fêtes*, to which people came from afar. Their ancient splendour is to-day extinct ; yet more than one trace of it remains. In memory, doubtless, of the days when money abounded in the mountains and charity was also prevalent, the blind and crippled and infirm of the *sertaon* still assemble in the *serra* to beg upon the roads. I have encountered extraordinary choirs of blind men, who had joined themselves together in order to chant their litanies, and who, it appears, could manage to live on the *serra* when they would starve to death on the *sertaon*.

Such is the mountain life ; so different in so many respects from the life of the *sertaon*. The mountains are like lonely oases in the midst of vast tracts of land which are adapted only to stock-raising ; their history reminds one of that of some of the French ranges, to which various reasons, including, very often, an abundance of water, have attracted a numerous population, so that they are suffering now from over-cultivation. One cannot but be struck by the numerous points of resemblance between the Serra de Baturite and the Cevennes of the Gardonnenque, which in places are tilled to the very summits, while the dried-up heaths at their feet nourish only a few flocks of sheep and their rare attendant shepherds.

CHAPTER XV

EMIGRATION FROM CEARÁ AND THE PEOPLING OF THE AMAZON BASIN

The causes of emigration from Ceará—The drought of 1877-1879—
The *paraoras*—Amazonia before the invasion of immigrants
from the Ceará—The gathering of rubber and the penetration
of the forests—The economic development of Amazonia.

IN the north of Brazil Ceará has been a centre of emigration, of dispersion, as is the fate of poor countries. The central table-land of France has suffered in the same way. Ceará accumulates reserves of population which famine afterwards disperses. To the west of Ceará lies the immense tract of land formed by the basins of the Tocantins and the Amazon; the largest belt of forest existing in the world. It was thither that the immigration from the Ceará was directed. To people its southern provinces Brazil was forced to call for foreign immigration. In the north, on the contrary, a race of indigenous settlers was available. This was a very fortunate circumstance for Brazil; for nature had set apparently insurmountable obstacles in the way of peopling the Amazon basin. The climate was enough to repel Europeans; none but the half-breeds of Ceará were capable of supporting it. Although the latter knew nothing of the fatal humidity of Amazonia, yet it resembled the latter in its continual high temperatures, and the population which had formed

in the *sertaon* was adapted beforehand to the conditions of existence which it encountered in the forests of the Amazon.

The migration from Ceará has been of the essential factors in the formation of the modern Brazilian nation. Thanks to this migration, the north of Brazil is peopled entirely by men of Brazilian origin, speaking the Portuguese language, and there is nothing in the north to correspond with the Italian question of San Paolo or the German question of Rio Grande.

To understand the motives which drive the people of Ceará from their native State, we must learn something of the great calamities which from generation to generation have fallen upon their country. Of all the historic droughts that of 1877-1879 was the most disastrous. It is vividly remembered throughout the *sertaon*. This it was that provoked the first wholesale migration.

The disaster was all the more irreparable in that it fell after thirty-two years of prosperity, during which period the wealth and the population of the country multiplied in proportion. Since 1895 the number of inhabitants had increased from 340,000 to more than a million. The increased cultivation of cotton had resulted in extensive new clearings, and no precautions had been taken against drought. The inhabitants began to fear the drought as early as January, 1887, when the sowing was delayed through the absence of rain. The people of Ceará are steeped in superstition. The general belief is that if it rains on the day of Santa Lucia, which falls on the 13th of December, it will also rain in the following January; while rain on the 14th of December means rain in February, and rain on the 15th means rain in March. These three days of December bear the name of "the

hopes of Santa Lucia." Now in 1876 "the hopes of Santa Lucia" had failed, and this failure was the beginning of the anxieties which gradually grew more acute as the prediction was fulfilled.

The cattle were the first to suffer ; after them the human cattle, the slaves ; finally the free population itself became affected. It is the custom with the people of the *sertaon* to feed on maize and black beans from May (after the first crops) until August or September ; then they fall back on manioc, which should suffice until the following summer. But manioc was as scarce as maize. The price of alimentary products of the first necessity rose abruptly. The poorest felt the pinch of hunger first. There were two possible methods of helping the afflicted populations : either they might be assisted at their homes in the interior, food being distributed in all parts of the *sertaon*, or large numbers might be gathered together at certain selected points, and enabled to live there. The first method was the more logical and its application was attempted. However, the distribution of food in the interior was interrupted in November, 1877, and the people were then concentrated in certain of the towns, in the port of Aracaty, and in the capital. An insurmountable obstacle had been encountered : the difficulty of communication. It may be imagined how painful and costly it was to transport supplies from the coast to the towns of the interior. It was possible to distribute help on the spot only so long as a small reserve of food was left, so that it was enough to send money to be distributed as alms to the poorest of all, thus enabling them to buy food in the neighbourhood. But when these small reserves were exhausted, when even the rich went hungry, and when it became necessary to send not money, but food, the distribution of relief in the interior would

have been a task beyond the strength of any administration.

Instead of receiving further relief in their homes, the people had to go where they could be relieved. While a portion of the population made for the *serra*, seeking for land which might support them, another portion marched in an army upon Fortaleza, where they encamped until the end of the drought. It was at Fortaleza that the provisions dispatched from the rest of Brazil and from abroad were disembarked. This emigration toward the towns is one of the most curious facts in the history of the drought. At Aracaty there were 60,000 of these unfortunates; at Fortaleza matters were still worse; in normal times the town contained barely 30,000 inhabitants, but in 1878 the refugees increased its population to 125,000. Their sufferings were incredible. They lived in huts built under the trees of the little oasis which so prettily encloses the town, and which they filled for two years with the spectacle of their poverty. Unoccupied, shrunken with hunger, in rags, they were reduced to an insufficient and unhealthy diet. In the interior of the country the poverty was greater still. The people ate grass and leaves, and even the root of the *muçuna*, which is poisonous. The most terrible incident of the time was the outbreak of small-pox in the camp of the Fortaleza refugees. It claimed 10,926 victims in November, and 15,352 in December. During the whole year it carried off no less than 56,791 persons in Fortaleza. The epidemic destroyed nearly half the population. At last the dead were no longer buried, so the able refugees were forced to do the work, by which they obtained their daily subsistence.

The rains were deficient from 1877 to 1879. Only in February, 1880, did an abundant rainfall occur. But the rains did not at once put an end to the suffering; and it

was with the greatest difficulty that the refugees were forced to return to the interior. They were affected by a profound discouragement ; they no longer believed in the possibility that favourable years might return. They expected to see, after a month of deceptive promise, another dry spring like that of 1879. Even had they been sure of the continuance of the rains, there was the apparently insoluble problem of living until the crops were matured. Not a head of cattle was left ; the capital accumulated on the *sertaon* had disappeared ; no race less patient and enduring could have faced such poverty and wretchedness.

No drought since that of 1877-1879 has had equally disastrous results ; although that of 1900 recalled the three dreadful years. Once again Fortaleza was full of refugees who had abandoned their fields. The public authorities had never ceased to seek means of remedying the effects of drought : in 1877-1879 food was distributed ; in 1900 it was thought better to open relief works for the indigent. They wished to employ the able-bodied men whom the drought had deprived of their ordinary occupations, as well as their resources, upon important undertakings of public utility. Thanks to this opportunity of obtaining labour, they undertook to accomplish an important scheme of irrigation. The construction of the reservoir of Quixada, which had been several times commenced and several times interrupted, was rapidly completed. A proposal was also considered of extending the railways, so as to cure the famine by better means of communication.

Useless pains, insufficient palliatives of the evil resulting from the droughts. The irrigation scheme seems to have miscarried. The Quixada dam will probably never return the capital which it has cost. One has to reckon with the skies, which have never since the completion of

the work yielded sufficient rain to fill the reservoir and make irrigation possible. Did the waters reach the requisite level it would be possible to create a small agricultural centre near by, but not to provide the assistance necessary to save the pastoral population of the *sertão* from the effects of drought. As for the railways, was their only function to be that of transporting official alms to the necessary point? A province cannot live indefinitely upon alms.

In reality there exists only one remedy for drought and famine: emigration. The idea of emigration should meet with little opposition from the people of Ceará; for they are very lightly established on the soil. The *moradores* are not peasant proprietors; they change their holdings from year to year. They used independently to move from point to point of the interior of the State, before the custom of emigration to other States was established. Witness the periodic migrations from the *sertão* to the Serra do Baturite and the Serra do Sobral. The concentration of the rural population in masses upon the towns in times of want proves at the same time their penury and the facility with which they abandon the soil. The refugees of Fortaleza—the *retirantes*, according to the Brazilian term—were already emigrants. Instead of remaining at Fortaleza to live upon the always insufficient public rations, why should they not prolong their journey to regions where the skies are less inclement?

Even before 1877 every year of drought had produced a migratory movement; but such migration was only effected by land. In 1887, for the first time, emigration was effected by sea. It began with the exportation of slaves. Every slave-owner began to rid himself of useless mouths. Then free men began to leave; and the Government itself promoted their emigration. Anxious

to reduce the number of refugees massed together at Fortaleza, it granted free passages to other parts of the Empire. In 1900 the Federal Government adopted the same policy, employing for this purpose a portion of the millions voted by Parliament for the succour of Ceará. This measure roused a heated discussion, and was generally unpopular in Ceará. The President, Campos Salles, was accused of the Machiavellian plan of transplanting the entire population of the province. Was the State to be succoured or dispeopled? It is curious to see in Brazil, where the administration has so often sought to people a province by offering a free passage to immigrants, an example of the opposite policy of seeking to empty a province which can no longer support its inhabitants.

The States which profited most extensively by the emigration movement were Para and the Amazon; and their respective Governments favoured the policy even more emphatically than the Federal Government. The State of Para had a representative in Ceará whose function was to develop the movement; and he was also empowered to offer free passages. Many inhabitants of Ceará left it at their own expense. The movement, begun in 1877, thenceforth suffered no check; at the present time the rubber crisis has barely commenced to diminish it. It was felt first on the *sertaon*, but finally the contagion spread to the *serras*.

It is extremely difficult to judge precisely of the extent of this migration; there are no complete statistics. In 1877, 4,610 emigrants left Fortaleza for the northern and 1,496 for the southern provinces. In 1878 the number of emigrants was nine times as great—54,000. The movement has been continuous, and has been more active in the bad years; for example, in 1889 and 1898. For 1900 our statistics are almost complete; 47,835 persons

embarked that year, about two-thirds leaving for the basin of the Amazon, and a third for the rest of Brazil. To gain some idea of the importance of this exodus we should recall the fact that the population of Ceará amounted at most to one million only, and that the same proportion in a country of the size of France or Italy would amount to the fabulous figure of nearly two millions of emigrants per annum.

The region which the majority of the emigrants from Ceará made for is even now one of the most sparsely populated countries in the world. A vast wilderness, almost absolutely level, with a few hills of granite strewn upon its surface; low-lying plains covered by annual inundations; dry land rarely advancing as far as the river's banks; an immense system of navigable waterways, limited in all directions by lines of rapids; and in the axis of the valley a rapid, muddy river, as wide as an arm of the sea, destroying and rebuilding its banks, bordered by ponds and lakes which it fills in times of flood; down-stream, a semi-maritime region, an estuary full of great islands, separated by uncertain channels, which are scoured by such powerful tidal currents that navigation does not attempt to enter the mouths of the Amazon in a direct line, but turns aside by Para and the passages to the south of Marajo: such is the country of the Amazon, and the river that has given it its name. The forest reigns unchallenged; only to the north are there prairies, near the frontiers of the Guianas, and also on a portion of the island of Marajo.

Before the beginnings of immigration from Ceará the exploration of this country was very imperfect. The river has been open to international navigation only since 1867; and a few steamers have lately begun to ascend the stream. Formerly the voyage by sailing vessel to the mouth of the Rio Negro was a matter of weeks;

and the little city of Manaus was one of the most inaccessible in the world. Agriculture is making no progress. A few agricultural villages which in the eighteenth century were created on the Rio Branco have been deserted. On the banks of the river, from Obidos and Santarem to Belem and Macapa, there is nothing but a strip of cocoa plantations, and a few other tropical growths; and a few *fazendeiros* raise their cattle in the prairies of the *varzeas*—the recent alluvial flats of the Lower Amazon—and in the island of Marajo. Already, however, the exploitation has been commenced of the product which should ensure the economic importance of the Amazon: its rubber. But such exploitation is limited as yet to the forests of the Lower Amazon, and the immediate surroundings of Manaus. The lack of labour stands in the way of progress.

Formerly the basin of the Amazon was almost unpopulated. In 1848 the city of Belem, the only one in Amazonia, had 15,000 inhabitants, but two years later an epidemic of yellow fever greatly diminished their number. As for Manaus, even thirty years later it was only a village; Mathews, who visited it in 1879, estimated its population at 5,000. The Indian tribes of the forest refused to work; and a few thousand half-breeds, *tapuyoz*, a mixture of Portuguese, Indian, and negro blood—were utterly inadequate to draw upon the wealth that men were beginning to recognise in the bordering forests. Labourers were demanded on every hand. The first immigrants, who settled about Manaus, were Indians from Bolivia and Peru; but their numbers were wholly insufficient.

It was the influx of the inhabitants of Ceará, during the draught of 1877–1879, that made the development of the rubber trade possible. From that date the colonisation of the forest proceeded rapidly. The seekers of

rubber dispersed themselves throughout Amazonia ; but the region most regularly exploited was the basin of the Rio Purus and that of the Rio Jurua. These two rivers are navigable for a greater distance up-stream than any other of the affluents of the Amazon, and in the virgin forest, which the rubber-seekers were the first to invade, the exportation of rubber is only possible along the navigable water-ways. The Brazilians who mounted the Purus and the Jurua did not stop at the Bolivian frontier ; a war with Bolivia very nearly broke out on the subject of these lands, which a few years earlier had not even been explored. The foundation of the independent Republic of Acre, the treaty of Petropolis, and the cession of Acre to Brazil, were the result of the westerly march of the rubber-seekers.

The economic development of Amazonia was prodigiously rapid. In 1890 it exported 16,000 tons of rubber ; in 1900, 28,000 tons ; in 1905, 33,000 tons. It became, next to San Paolo, the most important centre of exportation in Brazil.¹ The cities increased in size ; the population of Para surpassed 100,000 ; that of Manaus attained to 50,000 ; and this growth of the cities, which was more rapid than the growth of the total population, is an index to the rapidity of the commercial development of the country. The Amazon became one of the great river highways of the world, serving not only the Brazilian Amazon, but also the regions of Peru which are crossed by the upper tributaries, and a portion of Venezuela, where products descend to Manaus by the Rio Negro.

The exportation of rubber created wealth on all sides. All other occupations were abandoned for the collection

¹ Total exportation of Brazil in 1906, £52,000,000
 Exportation of coffee £26,500,000
 Exportation of rubber £13,300,000

of rubber. The herds of cattle on Marajo and the cocoa plantations along the banks were neglected. Similarly, in the neighbouring districts of Guiana the fields and plantations were abandoned on the discovery of "placer" gold. No one thought of anything but rubber. Up to that time the country had produced its own food ; now it had to resort to importation. It became a market in which the other States of Brazil were able to sell their products at a highly profitable rate. All these changes were due to the importation of labour from Ceará.

The proprietors of the rubber forests send recruiting agents to Ceará.¹ These agents are, as a rule, veteran emigrants themselves, who, on returning to their villages, easily renew their old interrupted relations ; their tales, their promises, which they are not shy of making, and their interested generosity, soon attract a credulous troop of followers. This multiple propaganda has spread throughout the plateau as a veritable Amazonian legend, of a land where gold abounds, and the powers of nature are miraculous. Consummate psychologists, preaching to a people afflicted by drought, they describe above all the abundant waters, the daily rains, and the vastness of the river, the "mother of oceans." More than once I have been taken, while questioning the peasants of Ceará, for an emigration agent.

The agent, having collected his party, conducts it as far as Fortaleza, where he awaits with his recruits the advent of a steamer for Para. They are lodged at Fortaleza in inns of a rudimentary kind, and embarkation seems like a deliverance. But even before reaching the mouth of the river,

¹ The exile of the people of Ceará, their life in the forests, and the customs which they have brought with them into Amazonia, forms a picture so tragic and so picturesque that it has furnished the subject of one of the finest novels in modern Brazilian literature : "The Paraora," by Rodolpho Theophilo.

the *paraoras*—which is the name given in Ceará to emigrants destined for the Amazon—already obtain a foretaste of the deadly climate of the land in which they are going to settle ; the soaking atmosphere, the misty horizon, and the opaque sky. They then slowly complete the voyage to Manaos, whence the little river-steamers carry them to the *seringaïs*¹ on which they are engaged.

For the establishment of a *seringal*, a point of the forest is chosen where the rubber plants are particularly plentiful. The *seringal* consists of a central warehouse and a variable number of posts for two workers, each of whom taps the same trees every day. A primitive track is blazed from tree to tree ; the *paraora* makes his daily round, collecting the gum as he goes. At the opening of the track which leads to his trees, or even in the heart of the forest, he builds his hut, where he hangs his hammock and stores his reserve of rations. There he lives in complete isolation, the prey of terror and sickness, suffering torments from the mosquitoes. In a few weeks, however, he becomes accustomed to the forest, and adapts himself with extraordinary readiness to his new surroundings.

His labour is of two kinds : first he gathers the sap, then prepares it. It is coagulated by treating it on a wooden bat or paddle in the smoke of a wood fire ; a kind of hearth is built near the hut, and there are prepared the balls of raw rubber, which are placed in the hands of the master or foreman of the *seringal*, who dispatches them down the river to be exported to America or Europe. At the other extremity of Brazil, in the forests of Paraná, similar hearths are constructed for drying the leaves of the *maté*-tree ; but in the case of *maté* the hearth is the centre of things, the heart of the

¹ *Seringal*, plural *seringaïs*, a rubber station,

ephemeral world in little which comes together to collect the leaf, while the rubber collectors' hearths are scattered over the *seringal*; there is one in the neighbourhood of each isolated post. There are many other differences between the life of the *maté* gatherers and the rubber collectors. In the damp that rises from the soil and the sickly shadow of the forest the *paraoras* suffer from the Amazonian climate; they are ravaged by tropical maladies: by beriberi, yellow fever, and, most dangerous of all, paludism in all its innumerable forms, which scarcely a man escapes.

When the floods of winter render the forest uninhabitable, the labourers of the *seringaïs* take refuge at the central station, and there, while waiting for the waters to recede, enjoy the only season of repose in their laborious existence. This is the time when it is easiest to become acquainted with this singular population, among whom neither avarice nor ambition has lost its power; rubber inspires them with a fever like the thirst for gold. All other desires, all other sentiments evaporate: they despise comfort; they despise even health; yet the money they earn is immediately expended in *fêtes*, of which the noise is swallowed up by the forest; rejoicings in which spirits, as usual, play a prominent part.

Despite fatigue and danger, few *paraoras* derive any lasting profit from their labours; their condition is almost always penurious; the passage to the Amazon, which is paid by the master of the *seringal*, is regarded as a debt of the labourer's. He thus begins his service with a heavy debt, and only regains his liberty when this is paid off. At the same time all that he consumes is debited to him, and all that the stores of the *seringal* provide him with food and manufactured articles, from manioc flour down to the instruments of labour, and this at arbitrary prices. The debt holds the *paraoras*

in a state of veritable slavery; flight is difficult; they are in the hands of their masters, bad or good, and have scarcely any defence against them. In such a country as the Amazonian basin the task of the police is difficult.

Few *paraoras* return to Ceará, although they frequently send small sums to their relatives who have remained at home. These sums help the general prosperity of the Ceará to recover slowly from the periodical drain of the droughts.

The gum of the *heveas*—the *borracha*—is not to-day the only rubber collected on the Amazon. For twenty years the gum of another species has been collected—the *Castilloa elastica*, which the Brazilians know as the *caucho*. While the *heveas* grow in damp districts which are regularly flooded, the *castilloa* grows in firm, dry soil. It was first of all discovered on the Peruvian affluents of the Amazon, and later on—about 1890—to the north of Amazonia, on the Rio Branco, an affluent of the Rio Negro. A new rush ensued; the region of Obidos, the last agricultural centre which had so far resisted the rubber fever, was deserted, and its population was absorbed in gathering the *caucho* rubber.

This is not collected like the rubber of the *heveas*; the latter trees are tapped, but the *caucho* is cut down, so that a post is exhausted in a season. Each year the collectors of rubber are forced to seek new trees. In the *seringaïs* of the old type a numerous staff of labourers works under the direction of a master, and for his benefit; but the gathering of the *caucho* rubber is a small industry, practised by isolated, independent pioneers, who set forth alone in their pirogues, and mount at will those rivers on whose banks they hope to discover a favourable centre for their operations. Their calling demands a great experience of the forests and the general

natural life of Brazil; and they are recruited almost entirely from the older population of the country. Compared to them the *paraoras* from Ceará, who labour on the *seringaïs* of the upper Purus and the upper Jurua, are simple unskilled labourers.

The economic prosperity of Amazonia was recently endangered by a rubber crisis. The fall of rubber values on the markets of Europe and America was sudden and profound; but was not of long duration, for the world's demand is greater than the supply. The crisis might have had one fortunate result, had it diverted a portion of the forces of the Amazon into other channels. Serious dangers must result from the abandonment of staple crops. The peril is not only economic; in 1900 there was a famine on the Amazon; even the manioc crop failed, and manioc flour was sold at prices which were unknown in Ceará in the extreme seasons of drought; a litre costing a milreis, or something over 5d. per pint (exchange being at 9). It is indispensable that staple cultures should be preserved, and that the clearing of the soil should go forward, as the population increases. Probably the rubber industry will finally be steadied and controlled by means of artificial plantations, which can easily be created near the rivers.

If the present primitive form of settlement on the Amazon is to be replaced by a true type of colonisation, this work will fall surely to the immigrants from Ceará. Hurried forward to deliver the first assault on the virgin forest, they have everywhere held their outposts; it is they who have cut the trail and trodden the path; who have endeavoured, after the measure of their weakness, to adapt the soil to the life of man.

Such is the debt which Brazil has contracted towards the men of Ceará. If Ceará holds a prominent part in the recent history of Brazil, it is not, as it is with San

Paolo and Rio, because its wealth and its population have rapidly increased ; but because it has peopled with its children a territory of ten times its own extent. It is because of its wealth in men that Ceará has deserved well of Brazil.

SUPPLEMENTARY CHAPTER

MINERAL RESOURCES, TRADE AND COMMERCE

BY DAWSON A. VINDIN

IT is somewhat difficult for the European mind to comprehend the vastness of the territory of the twenty States comprised in the United States of Brazil, within the boundaries of which nearly the whole of the countries of Europe could be comfortably stowed away. And yet this huge area has a population estimated at but 22,000,000, inclusive of Indians and negroes. It is only since the establishment of the Republic in 1889 that the progress of Brazil has been at all commensurate with the enormous natural resources it possesses. It will be seen by the following statistics that the trade of the country is rapidly expanding, the wealth of its people becoming greater.

The motto of the Republic is "Order and Progress," and unquestionably this is the guiding spirit of the present generation of Brazilians. Small revolutions may occur from time to time, but these should not be regarded seriously. The habits of centuries are not changed in a decade or two ; but the mass of the people, and particularly the governing classes, are all for peace and the development of the resources of the country. In this connection it is interesting to note that the Constitution of the Republic expressly stipulates that

Brazil shall not enter upon any war of conquest nor join with any other country in a war of aggression. Brazil is fortunate inasmuch that her wealth is almost wholly derived from products of the soil for which there is a world-wide demand; hence the measure of her prosperity will be relative to the increase of her population and the industry of her people.

MINERAL RESOURCES.

Although Brazil is known to have produced gold to the value of over £100,000,000—these figures being from official records—diamonds to the value of many millions, and is also the home of silver, platinum, lead, copper, iron, manganese, mercury, coal, monazite, graphite, and almost all varieties of precious stones and rare marbles, yet it may truly be said that mining as an industry plays a very small part in the prosperity of the country. I have no doubt, after having made a visit of inquiry and looked up all available information, but that Brazil will within a few years demand considerable attention from mining men, as there are few countries in which there are greater opportunities for profitable investment. Hitherto very little attention has been given to mining by either the Federal or the States Governments, with the exception of the State of Minas Geraes, the result being an absence of much needed mining laws for the guidance of those wishing to engage in mining on business lines. I understand that there is a likelihood of the States interested waking up to the importance of encouraging the development of their latent mineral wealth, and it would be well for them to consider that the great prosperity of California, Australia, and South Africa is largely due to the endeavours of the men who were first attracted to these countries in the search after the precious metal. It seems evident that many of the

first settlers in Brazil were drawn there by the tales of gold discoveries in the early days, but it would appear that most, if not the whole, of the gold won came from the banks of rivers or from near the surface of the soil. The amount of development of reefs at any depth has been very slight, and it is this work in the future that promises to find profitable employment for tens of thousands of workers, and besides adding to the general prosperity of the States yield good results to those who provide the capital; and modern mining means a considerable outlay before a return may be hoped for. It is this need of capital and necessity of waiting for returns that disinclines the Brazilians to undertake mining operations; it is consequently to European and American investors that the work will fall and by whom the rewards will be reaped. The fact that most of the mining lands throughout the country are the property of private owners, and that under the Federal and State Constitutions all minerals are the property of the freeholder, and not liable to any Government tax, renders any systematic searching or prospecting for minerals almost of no avail. The owners of these lands are not sympathetic towards mining at the present time; they will not mine themselves, and they will offer no aid to others; in fact, in most cases, mining prospectors would be warned off the ground as trespassers.

Certainly large blocks of mineral lands could be purchased at comparatively low rates—actually the value of the surface for grazing or farming purposes, but the purchaser would have to trust to chance as to the mineral values of his acquisition. If Brazil is to benefit by her enormous stores of hidden mineral wealth, especially by her gold, the law must step in to open private property to the prospector and miner. There should be no serious difficulty in drafting suitable and

equitable laws, and the result would be a very solid addition to the productive wealth of the country.

Gold is found in nearly every State in Brazil, but the only mines working on any extensive scale are those in Minas Geraes, owned by the St. John del Rey and the Ouro Preto Companies, both belonging to London. The St. John del Rey is probably the oldest gold-mining company anywhere operating from England, having been in existence since 1830, during the whole of which time it has been working. The original shareholders have received their capital back again and again, and the ore reserves to-day amount to over 1,000,000 tons. The gold won from this famous mine for the year 1909-10 was valued at £204,500. Not at all a bad result after eighty years' working. This mine has one of the finest mining and treatment plants in the world, and the management has succeeded in obtaining the extraordinary extraction of $95\frac{1}{2}$ per cent. The Ouro Preto Company has not been so successful as its neighbour, although it has paid several dividends.

There would appear to be an almost unlimited scope for profitable mining in Minas Geraes, but it is at all times difficult to obtain the right class of men to conduct operations; and in a country like Brazil the success or otherwise of any mining venture largely depends upon the type of man in charge of affairs. Apart from technical ability, a knowledge of the language and the people and unfailing patience and tact are necessary.

In the far south in the State of Rio Grande do Sul serious operations are being carried out at Lavras and São Gabriel, near the border of Uruguay, by two London companies—the Gold-fields of Brazil, Ltd., and the Brazilian Golden Hill, Ltd. These companies are opening out gold-mines at six different points and have managed to locate payable reefs in each case. Silver,

lead, and copper reefs have also been discovered, and as the facilities for mining in the district are especially good these companies appear likely to do well in the future, but this mainly depends upon the management both in Brazil and London.

The bulk of the gold produced in Brazil is obtained by the natives by washing the sands from the banks of the rivers in primitive wooden pans. At this they are extremely skilful and lose very little of the metal. Judging from the amount of gold recovered in this way throughout the country, and the fact that these washings must have been carried from gold-bearing reefs out-cropping on the surface, it is clear that when laws permitting prospecting on private lands are passed there will be many rich plums awaiting the experienced gold-seeker.

Next in importance to gold come the iron deposits. During the last two years a number of eminent mining engineers from the United States, Canada, and Europe have visited Brazil in order to examine and report upon the iron deposits of the country, which are now considered to be the richest and greatest in the world. The ores are mostly oxides; the carbonates are rare and usually associated with carbonate of calcium. The ores are found in plenitude at Minas Geraes, San Paolo, Matto Grosso, Goyaz, Santa Catharina, Espirito Santo, and Rio Grande do Sul. In Minas the ore is in some cases found in actual mountains, the analyses of which in five cases have yielded the following extraordinary high percentages :—

Ipanema : Sesqui oxide, 74·08 per cent., and Magnetic oxide, 15·05 per cent.

Sabara : Metallic iron, 75·023 per cent.

Itabara : Sesqui oxide, 92·074 per cent., and peroxide, 97·074 per cent.

Lençóes (Bahia) : Sesqui oxide, 93·014 per cent.

Several proposals have been made to the Governments of the various States by syndicates, but the Federal Government has been quick to recognise the great potentialities attached to these gigantic iron possessions; and I am given to understand will endeavour to assist in the establishment of local iron and steel works on a comprehensive and competitive scale. In so desiring the Government is acting rightly, although there are sure to be many difficulties to be encountered.

Coal of commercial value exists in Santa Catharina and Rio Grande do Sul at various places; but, notwithstanding its supreme importance in connection with industrial development, these two States have been regrettably apathetic in regard to its exploiting. The distinguished American engineer, Dr. J. C. White, a little while back made an investigation of these coal measures, and reported that the seams are comprised in one basin extending from Santa Catharina to Rio Grande do Sul and are workable throughout. The coal is classed between common bituminous coal and the lignite or brown coal of Germany. It contains 20 to 25 per cent. of ash and impurities; the latter can, however, be eliminated by means of the German process of improvement and by making impure coal into briquettes. The various reports furnished on different samples conclusively show that this coal is a valuable marketable commodity, and when made into briquettes is little inferior to the same articles made from Cardiff coal. That these coal seams are not being worked on an extensive scale, when it is remembered that all coal used on the east coast of South America has to be imported from Europe and is extremely costly, is only another instance of the inadaptability of the Brazilians to cope with mining problems. It seems evident that once

again this among other enterprises must be directed and financed by European or American houses.

The production of diamonds has been the means of adding greatly to the wealth of Brazil in the past; but since the advent of the Kimberley mines in South Africa the industry has been under a cloud, although finds of valuable stones are still of frequent occurrence. The first discovery was made in the year 1727, in the brook of Caeté-Mirim, in the State of Diamantina; since then stones have been found and lodes unearthed in many different parts of the country. Bahia has probably yielded the largest output of stones. From 1844 to 1845 the Customs at Bahia registered as being received 876,250 carats, and it must be borne in mind that Brazilian diamonds are considered to be of much finer grade than those produced from South Africa. The largest diamonds produced in Brazil come from the alluvions of the river Bagagem. The Southern Star, found in 1853, weighed $254\frac{1}{2}$ carats uncut, and when cut 125 carats. This stone was discovered by a negress engaged in washing clothes at the riverside. Other fine stones were the Dresden, which weighed when cut $176\frac{1}{2}$ carats, and the Corôa do Portugal, 127 carats.

The black diamond, or Carbonados, is found in Brazil in Bahia and Minas. There is a large demand for these stones for diamond drilling, and their value is increasing. A very large piece of this stone, weighing 3,078 carats, was discovered in 1895 in Bahia. At present prices this stone would be worth £50,000. Large specimens are frequently found. A fine specimen of a red diamond, found in Brazil some years ago, was sold in London in 1909 for £3,000, its weight being only $2\frac{1}{2}$ carats. Brazil is also rich in other precious stones, and some of the finest specimens of beryl in different colours, and

especially aquamarine, have come from there. Amethysts and a great variety of agates are also plentiful.

Manganese is likely to prove an important export, 220,021 tons having been shipped in 1907. Two mines at Quelez, 500 kilometres from Rio, possess reserves of ore amounting to at least five million tons. The freight and other charges connected with delivering the ore in Europe amounts to £2 per ton. However, a strong effort is being made to reduce these costs, and if those interested are successful a considerable extension in the shipments of this product may be anticipated. The ores, as mined, average 45 per cent. of mineral of commercial value, but are remarkably free from sulphur and phosphorus. Silver-lead, giving 40·25 of lead and about 6 oz. of silver to 200 lbs. of metal, has been found in quartz veins at several places in Minas. Other discoveries have been made in San Paolo and Rio Grande do Sul, but no effort has been made to deal with these "finds."

Brazil has practically an unlimited supply of monazite sands extending from the south of Bahia to Espirito Santo. The export trade is in the hands of two firms, who work together under agreement to maintain values. In 1907 they shipped to Hamburg 16,590 tons, which realised £28 15s. per ton. Professor Lacroix, of Paris, considers that iridium is to be found in these sands.

Beyond the metals mentioned and the precious stones enumerated Brazil is also the possessor of deposits of tin, mercury, wolfram, copper, salt, sulphur, nickel, mica, ochre, marbles of great beauty and quality, "and what not." Only time, investigation and development will discover and reveal the commercial possibilities and values of these multitudinous mineral indications, but it is fully evident that the study of mineralogy in Brazil furnishes a most fascinating occupation.

TRADE AND COMMERCE.

The Brazilian scheme of trade and commerce, it is fully evident, is in time to rely upon their own internal food supplies, and also, as far as possible, to manufacture their own requirements, and so be independent of the outer world. This is a great and laudable ambition, and its fulfilment is only possible in a country so magnificently endowed by Nature as is Brazil. Against this apparent desire, however, is to be set the love of luxury and display inborn in every Brazilian, which will always make a ready market in Brazil for that which will please the eye or the palate, or assist in the carrying out of his schemes of improvement. Brazilians are certainly, as far as the Custom House is concerned, taxed up to the hilt. These taxes are for the twofold purpose of providing revenue and of protecting the growers and manufacturers of the country. In this respect the heavy tariff is undoubtedly a success. Manufactures are in existence and flourishing which certainly could not exist without the aid of a protective tariff. Of course living is extremely high for all but the poorest class, but it is extraordinary that the mass of the people are absolutely contented, and the only expressions of dissatisfaction are from Europeans who have been accustomed to obtain their requirements at one-half or one-third the prices they are obliged to pay in Brazil. I began to realise the wide difference in the cost of things when I received my first hotel bill at Rio de Janeiro, and found a small bottle of Guinness' stout charged at 2,500 reis—equal to 3s. 1½d.; the same article would cost me 3d. in London!

The following is a list of a few of the duties charged :—

80 *per cent. ad valorem*.—Underclothing and shirts.

60 *per cent.*—Felt hats, harness, boots, belts, ties,

mineral waters, cotton piece goods, furniture, silk, and fine linen, china and glass, guns and revolvers, &c.

Most other articles are assessed at 50 per cent., but, somewhat curiously, motor-cars and pneumatic tyres are admitted at 5 and 7 per cent. *ad valorem*; precious stones come in at 2 per cent., and gold jewellery at 15 per cent., so that the "idle rich" are "let down lightly."

In illustrating the progress of a country statistics are indispensable. The statistics prepared by the Brazilian Government are excellent as far as they go, but for purposes of comparison they are, to say the least, most unsatisfying. For instance, certain information is procurable compiled to the end of 1909. Other equally important details are only obtainable for the year 1906. However, one must make the best of the material at hand.

Since the initiation of the Republic twenty-one years ago, Brazil has been steadily forging ahead. Her credit has been improved by reason of the more able management of the national finances; and, provided those entrusted with the governmental control follow on the same lines, none but bright days should be before her.

The import trade of Brazil shows some curious fluctuations, although these can be to some extent explained by the varying quantity of material required for large railway and other undertakings. Brazil imports very little in the way of necessities, and her expenditure on imported luxuries necessarily varies with the prices realised for her main articles of export.

Brazil is a wealthy country, and cannot help being so, as the figures of trade show the balance to be in her favour year after year. As she re-exports nothing, but ships away only her own produce, the difference between imports and exports must necessarily mean an accession

to the nation's wealth ; the following figures explain themselves in a measure :—

TRADE FOR 1907-9.

(Published by the Brazilian Commission, Paris.)

	1907. £	1908. £	1909. £
Principal Exports...	54,176,898	44,155,280	63,724,440
Imports	40,527,603	35,491,410	37,111,748

EXPORTATION OF THE NINE PRINCIPAL PRODUCTS. (FROM THE DEPARTMENT OF COMMERCIAL STATISTICS, RIO DE JANEIRO, JANUARY 29, 1910.)

		1908.	1909.
Coffee (sacks)		12,658,457	16,880,696
Value		£23,039,231	£33,475,170
Rubber (kilos)		38,206,461	39,026,738
Value		£11,784,637	£18,926,061
Tobacco (kilos)		15,263,864	29,791,757
Value		£841,290	£1,339,336
Sugar (kilos)		31,577,394	70,207,784
Value		£305,597	£689,266
Maté (kilos)		55,314,625	58,017,850
Value		£1,650,341	£1,657,787
Cocoa (kilos)		32,955,920	33,817,739
Value		£1,977,457	£1,598,959
Cotton (kilos)		3,564,715	9,968,114
Value		£206,158	£591,814
Hides (kilos)		30,411,943	35,783,027
Value		£1,316,403	£1,819,541
Skins (kilos)		3,562,886	3,897,199
Value		£704,121	£972,319
Total Value		£44,155,280	£63,724,440

SPECIE AND FOREIGN BANK NOTES.

1907...	... £4,410,621.	1909...	... £8,777,694
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In looking at these figures it will be noticed that the price of rubber has a material effect on export totals, and in a lesser degree the same applies to the price of cocoa. As there appears to be a tendency towards over-production

of both coffee and cocoa as against a good demand and higher prices for rubber and cotton, the policy of the grower should be towards extending the growth of the two last products. It is doubtful if any country is in a better position to grow cotton profitably, and the demand is likely to exceed the supply for many years to come. The cocoanut-tree is not a native of Brazil, but it has been acclimatised there for a long time, and prospers admirably in the Northern States, and to-day Brazil possesses more cocoanut-trees than any other country in the world. Notwithstanding the enormously increased demand for copra, the produce of the nut, for the purpose of manufacturing oil, nut butters, and soap, there does not appear to have been any export so far. This is one of the most profitable openings possible, and will no doubt be soon exploited. Coming back to the import figures, we find, in 1907, that Great Britain held the lead with goods to value of £12,100,000, followed by Germany, £6,200,000 ; United States, £5,000,000 ; Argentina (flour and wheat), £3,600,000 ; France, £3,400,000 ; Portugal, £2,200,000 (mostly wine). Notwithstanding that Great Britain is at the top of the list, her position is being assailed year after year by both Germany and the United States, and it is a certainty that unless more activity is shown by British exporters much of the Brazilian trade will go elsewhere.

There are five foreign banks operating in Brazil, and in every case they are doing an extremely profitable business owing to the heavy rates of interest charged. These are :—

	Capital
The London and Brazilian Bank ...	£ 2,000,000
The London and River Plate Bank...	... 2,000,000
The British Bank of South America ...	1,300,000
Brazilianische Bank für Deutschland ...	500,000
Banco Commerciale Italo-Brasiliano ...	300,000

In London the Brazilian Government is represented by Messrs. Rothschild as Financial Agents and Advisers.

Most of the Government business in Brazil is transacted through the Bank of Brazil, which is regarded as the National Bank.

British investments in Brazil in 1908 totalled £135,610,024. One of the most remunerative monopolies of Brazil is the electric lighting and tram system of Rio de Janeiro, which, by the way, is a very fine and complete installation. It is owned by an Anglo-Canadian group, and is controlled in Canada. The whole of the electric power is generated by water, and carried a considerable distance. Many of the principal enterprises in Brazil are financed with British capital and managed by Britishers, who are invariably respected and esteemed by the Brazilians.

A considerable sum of money is annually remitted to Europe by the foreign element. It is computed that there are 600,000 Portuguese, who send home some £3,600,000 each year, and 1,500,000 Italians, who annually remit to Italy savings to the amount of about £7,500,000. Large sums are also remitted by those of other nationalities.

Brazil possesses a good system of railways, but they are certainly capable of improvement, and need linking up, but this is all under way, and its accomplishment is promised within the next few years.

On the 31st of December, 1908, the total mileage was 18,524 kilometres, with 3,000 kilometres in course of construction, making 21,524 kilometres in all.

The following account of the various railway systems is from an official publication :—

“The Goyaz Railway will now pass through Catalão, the second city of this State, and have two branches, one to Uberaba and the other to near Araguary, thus

serving the northern boundary of San Paolo-Minas Geraes.

"The Central Railway reached, in 1909 (December), its present terminal point, 'Pirapóra,' on the São Francisco River. There will also be a loop from the Victoria-Diamantina Railway to Curvello on the Central Railway; a new line from Mogy Mirim (San Paolo), to Santos; an extension of the Leopoldina Railway to Cabo Frio (north of Rio), and the doubling of this company's lines and acceleration of its service to Petropolis, this trip taking only one hour and a quarter instead of two, and ten trains being proposed daily as a minimum (instead of four), and the reduction of freights on this line, and a direct service between Rio de Janeiro and Victoria (Espírito Santo).

"The Corcovado Railway will be operated by electricity in future. A project is also being started for a line between Petropolis and Theresopolis; and several other small lines are planned to link up the existing trunk railways, and increase the facilities for ocean transport.

"In Santa Catharina 200 kilometres of line are surveyed, and the Government will grant a subsidy of 15 contos per kilometre, repayable according to the profit of the company.

"The rail is also now complete from Rio to Porto Alegre, a distance of 2,752 kilometres, taking ninety-six hours over the journey.

"The suburban service of the Central Railway will be electrified at a cost of 5,000 contos. During 1908 this (residential) service carried over 20,000,000 passengers.

"Rio Grande do Sul will have the first rail motors, on the line Venancio Aires-Soledade.

"During the past year, 1909, two new English companies have been formed, viz., Brazil Great Southern,

capital £100,000, and the Araquará Railway (extensions in San Paolo).

"In a few years it will be possible to travel by rail from Rio de Janeiro to *any* of the Brazilian States, or to Uruguay, Paraguay, Chili, and Bolivia, and (if the proposed bridge is built across the River Plate) even to Buenos Aires. In Brazil, fortunately for the prosperity of the country, it is not the railways that have awaited population before adventuring into the interior. On the contrary, they have (as is only natural in new countries) proved the pioneers of civilisation everywhere throughout the Republic. Certainly they will be harbingers of peace, as well as progress, wherever their twin rails extend.

"Where receipts are less than expenses, in several noteworthy cases the fact is due to the length of line under construction.

"In the near future all the lines in Brazil will be linked up, and as far as possible a uniform system of freights arranged."

I may here remark that a conto is the equivalent of 1,000 milreis, but the present fixed rate of 1s. 4d. per milreis represents £66 13s. 4d.

Brazil is well placed in regard to shipping facilities, having a regular direct weekly mail service by the splendid mail steamers of the Royal Mail and Pacific Companies to Southampton and Liverpool. Two fine services are also maintained by Messrs. Booth from the Amazon to Liverpool, and by Lamport and Holt from Santos *viâ* Rio and Bahia to New York, and thence to Liverpool.

There are four other lines trading between England and Brazil—the Prince, Nelson, Houlder, and McIver Companies. The fine boats of the New Zealand Shipping and the Shaw Savill lines also call at Rio on the way home from New Zealand.

Regular mail services to Germany, France, Italy, Austria, Spain, and Portugal are maintained by fine fleets of vessels. The finest ships sailing between Europe and Brazil are those of the Italian Lloyd, which travel at a speed of 19 knots, as against $13\frac{1}{2}$ –14 knots by the British, French, and German mail boats. If the race is to the swiftest then it behoves our British companies to “get up steam.” It would appear that the trade is worth getting and keeping.

A good coasting service is maintained by the fleets of the Lloyd-Brasiliero Company, a mail line heavily subsidised by the Government. Some fine steamers owned by Messrs. Lage Brothers, of Rio, also trade between that port as far north as Pernambuco and south to Rio Grande do Sul. It is interesting to note that the commanders and engineers of these ships are all Britishers born, although naturalised Brazilians “in accordance with law.”

The Amazon has a whole system of steamers to itself and its branches, foremost amongst which is the fleet of forty boats owned by the Amazon Steamship Company, which, by special concession, is the only British line trading exclusively in Brazilian waters.

GEOGRAPHICAL MILES AND DISTANCES FROM RIO DE JANEIRO.

Northwards.—Victoria, 270 ; Bahia, 735 ; Aracajú, 904 ; Maceió, 1,015 ; Recife, 1,125 ; Parahyba, 1,195 ; Natal, 1,273 ; Fortaleza (Ceará), 1,533 ; Amaração (Piahy), 1,739 ; São Luiz (Maranhão), 1,915 ; Belem do Pará, 2,280 ; Manáos, 3,204.

Southwards.—Santos, 199 ; Paranaguá, 364 ; Florianópolis, 523 ; Rio Grande, 875 ; Porto Alegre, 1,008 ; Montevideo, 1,180 ; Corumbá, 2,803 ; Cuyabá, 3,242.

Distances.—From Rio to New York, 4,748 miles ; time, 17–19 days, *viâ* Barbadoes (Lamport and Holt Line). Rio to Genoa, 5,040 miles, 13½–15 days. Trieste, 5,838 miles ; Bordeaux, 4,894 ; Southampton, 5,034 ; Bremen, 5,507 ; Hamburg, 5,519 ; Antwerp, 5,244 ; Odessa, 6,341 ; Libau, 5,900 ; Valparaiso (*viâ* Magellan Straits), 4,241 miles. Time from Wellington (New Zealand), 23 days to Rio de Janeiro. From Rio de Janeiro to Montevideo, 4 days. By coasting steamer up to 15–16 days. Rio to Paris, *viâ* Barcelona, 13 days ; *viâ* Cherbourg, 16 days, or Lisbon, 16 days. Rio to Santiago or Valparaiso, *viâ* Buenos Aires, and the Pacific Railway, 7 days. By the same route (and steamer) to Callao, 17 days. From Cuyabá to Manáos by sea, not less than six weeks are required at present, changing steamer at Rio de Janeiro (Brazilian Lloyd).

NOTE.—The General Mining Regulations of the State of Bahia (1905) enable the prospector to expropriate private land upon which he has discovered minerals for the surface value as determined by arbitration. A similar law is before the Minas Assembly. Diamond lands may be leased from the Government, and concessions of various kinds obtained.—[TRANS.]

MAP OF
BRAZIL
 TO ACCOMPANY
"BRAZIL"
 BY
 PIERRE DENIS

Scale: 1-8,500,000

0 50 100 200
 English Miles

Equator

**ATLANTIC
 OCEAN**





INDEX

A

- Abolition of slavery, 69 ; results of, 240
- Acré, Federal territory of, 121, 359
- Administration, importance of, 21
- Agriculture, primitive methods, 283-5 ; 339-40
- Alves, President, 78, 125 ; 254-5
- Amazonia, river transit in, 97 ; immigration from Ceará, 350-65 ; description of, 357-9 ; exports of rubber, 359 ; steamer service, 381
- American (U.S.A.) colonists, 221
- Anchieta, Jesuit leader, 46
- Argentine Republic, war with, 68
- Aristocracy, the Brazilian, 18 ; its love of rural life, 19, 20 ; political power of, 21 ; origin of, 27, 34-5
- Assumar, Conde d', influence in pacifying Minas, 61

B

- Bahia, history of, 28-43, 137
- Bank, the London and River Plate, 146
- Banks, 377
- Barbadoes, purchases at, 146
- Baturite, Serra de, 315
- Bello Horizonte, 93

- Brazil, history of, 27-78 ; antiquity of civilisation, 15, 16 ; family life, 21 ; unique position of, 27 ; attacked by enemies of Spain, 39 ; the Dutch domination, 40-1 ; condition at end of eighteenth century, 62 ; proclaimed a kingdom, 64 ; Empire, 66 ; Republic, 71 ; area of, 79 ; geography, 79-81 ; geology, 81 ; vegetation, 83 ; climate, 86 ; landscape, 87-92 ; progress and resources of, 366 ; mineral wealth and products, 367
- Brazilian people, the variety of types, 16 ; creation of, 31
- British investments, 378
- Buildings in Rio Grande, 299
- Budgets, State and Federal, 120

C

- Cabral re-discovers Brazil, 29
- Caipire*, the, 19
- Caisse de Conversion, 158-63 ; 233
- Campos, 91
- Capitaneas, the, 30-2 ; royal do., 33-4
- Ceará, 327-49 ; people of, 327 ; description, 328 ; droughts, 328 ; amusements of people, 343 ; emigration from, 350-65 ; drought, famine, and pestilence, 351-4

Coal, 371; Brazilian apathy concerning native product, 372
 Coffee, yield of, 140; the "boom," 170; development of the industry, 174-5; harvest, 201, 202-3; fresh plantations forbidden, 213; harvests of 1906-7, 215; the "boom," 222; prices, 222; can it be grown by peasant proprietors? 231-2, 234; valorisation of, 235-66; size of crops (table), 237-8; sudden extension of plantations, 239; chief export of Brazil, 242; prices ruled by valorisation, 236-7; harvests of 1906-7, 264; in Ceará, 346
 Caramuru, 32; services of, 33-4; ancestor of Bahian race, 34-5; 55
 Castel Branco, murder of, 57
 Cattle, 104, 137; *see* Stock-raising
 Civil war, 73-6
 Civilisation, Brazilian, long established, 15
 Coelho, 30
 Colonisation, policy of railroads and Government, 116-17; Government attempts at, 226-7; 229-34; in Paraná, 237-91; in Rio Grande, 292-312; policy followed in Rio Grande, 311
 Colonists, *see* Immigrants, Italians, Peasant Proprietorship, Small Holdings
 Colonists of South Brazil, 22-3
 Constitution, the, 119
 Copra, 377
 Correia, *see* Caramuru
 Cotton, prospects of, 377
 Coutinho, first Captain of Bahia, 33
 Crops, dispersion of, 132-3
 Cubas, Braz, 46
 Curitiba, 273-4

Currency, paper, 147; 150 *et seq.*
 Customs, 119-21, 130-2

D

Democracy only theoretical, 19
 peasant democracy of the South, 23; rural democracy of Paraná, 267; of Rio Grande, 292-312; *see* Colonisation
 Diamonds, 367; famous finds and stones, 372
 Droughts of Ceará, 328-31, 351-4
 Dutch, the, occupy coast of Brazil, 40; driven out of Brazil, 41
 Duties, export, 120

E

Education, in San Paolo, 170-80
 Emigration from Brazil, 18; of "colonists," 206; from San Paolo, 214-15 (table); of negroes from Ceará, 340-2; of the Ceará people to the Amazon, 330-65; from Ceará to south, 356
 Empire, the, 66-71
 Exchange, 147 *et seq.*; speculation in, 154; examples of, 155-57; 211-12.
 Exports, 140; of gold, 146-7; of coffee, 238; of maté, 288; of rubber, 364; for 1907-9, 376; of nine principal products, 376

F

Falls, bar to navigation, 97
 Fazenda, the, 19, 20; 90, 91
 Federal Government, the, 120, *see* Union
 Federalism, 127
 Finance, 145-63
 Fiscal problem, the, 130-4

Fonseca, President, 71 ; forced to resign, 73
 Fonseca, Hermes da, President, 78
 Foreigners in Brazil, 24
 Forests, 85-8
 Fortaleza, terrible distress in, 353
 Free Trade, 9
 French colonists, 271-2

G

German colonists, 220 ; in Paraná, 271 ; in Rio Grande, 295 ; houses of, 299
 Gold, imports of, 140 ; exports of, 146-7 ; imports of, 243 ; high prices, 243 ; the crisis, 244 ; production of, 367 ; methods of working, 368-9 ; English mines, 369 ; methods of washing, 370
 Government, *see* Union, Federal Government, States, Empire, Republic

H

Harbours, 105, 106
 Henry the Navigator, 29
 Holland, *see* Dutch
 Hospedaria, the, or immigrants' hotel, 196-7

I

Immigration, into South Brazil, 22 ; (into San Paolo, 181-217) ; contracts, 185-90 ; laws and subsidies, 189-203 ; statistics of (table), 193-6 ; contracts, 198-9 ; accommodation, 199 ; wages, 202-3 ; behaviour of immigrants, 205 ; emigration of, 206, 224 ; the Italian Government attempts to check emigration, 209 ; wages and allowances 212 ; land for crops, 241-3 ; in Rio Grande, 295

Immigrants, in San Paolo, their crops, 213
 Imports, 375
 Indian blood in Brazilian race, 34-6
 Indians, slavery of, 46-7 ; attack settlers, 47 ; raids upon, 48 ; in Ceará, 331
 Industries, 132 ; dairy industries, 142 ; tanning, 303 ; carnauba candles, 339
 Iron, 370 ; Government policy concerning native ores, 371
 Isabel, Crown Princess, acting as Regent signs Bill abolishing slavery, 69
 Italians, *see* Immigration ; numbers in Brazil, 207 ; 209-10 ; in Rio Grande, 295

J

Jesuits, work of, 36 ; obtain decree prohibiting enslavement of Indians in Bahia, 37 ; results of, 37 ; expulsion of, 43 ; 46 ; obtain an edict prohibiting Indian slavery, 48 ; obliged to fly the country for a time, 49
 João II. breaks the feudal power of Portuguese nobles, 29
 João III., his policy of *capitaneas*, 30-1 ; founds royal *capitaneas*, 33-4
 João, Dom, of Brazil, 63 ; proclaimed King, 64 ; abdicates, 65

L

Labour question, the, 216-17
 Land, 116-17 ; size of holdings (table), 218-19 ; 223 ; insecurity of titles in Paraná, 286 ; prices in Rio Grande, 303-4 ; State owner-

- ship, 305 ; usurpations of, 305-7 ;
new laws, 307-8 ; *see* Small
Holdings
Lins, State President, his colonial
policy, 273, 279
Lisbon, importance of, in sixteenth
century, 30
Living, cost of, 135 ; increased by
extravagance, 136
Loan, Funding, the, 150 ; valorisa-
tion, the, 159 ; 231 ; 254-5 ; 259 ;
262
Loans, service of, 145

M

- Maciel, rebel, 76-7
Mamelucos, nature and origin of,
42-7 ; raids upon Indians, 48 ;
engaged by Bahians, 49 ; 52
Manganese, 373
Manoel, Dom, 30
Mantiqueria, the, 81 ; 169-70
Maté, 140, 286-9
Mello, de, 73-5
Metals, 373
Minas, history of, 55-62 ; anarchy
and struggles for the mines,
58-62 ; becomes an agricultural
State, 62 ; 81, 89, 141 ; industries,
142 ; immigration into, 195 ;
mining laws of, 367
Mineral Resources, 367-73
Mines, discovery of, 40, 56
Mining, Prospects of, 367-9 ;
position of the landowner, 368
Miscegenation, the origin of the
Brazilian nation, 34-6
Moraes, President, 76
Morro Cipo, 231

N

- Natural selection in formation of
Brazilian people, 34-5, 37-8

- Navigation, 96 ; *see* Rivers
Negroes, 24 ; trade in, 37-8 ;
(negro populations, 313-26) ;
numbers of, 313 ; abolition of
slavery, 313 ; result of, 315 ;
habits and character as workers,
317-20 ; wages of, 321 ; de-
bauched habit, 324 ; songs, 325
Nova Fribourg, 221
Nova Helvetia, 221
Nova Odessa, 229

O

- Orlando, co-operative society of,
232
Oxen, use of, 91

P

- Paolo, San, history of, 43-52 ;
decadence of, 50 (164-80) ;
development of, 164-6 ; geology
of, 167 ; rivers, 168 ; city of, 169,
175 ; society of 176 ; education,
176-80 ; *see* Small Holdings in
Para, 97
Paraguay, war with and exter-
mination of people, 69
Paraná, 192, 257-91 ; a journey
through, 270-76 ; the maté crop,
286-9
Paraná, river, 97
Paraná wagoners, the, 103
Paulistas, the, claim prior rights
to mines, 30 ; defeated, 60
Peasant proprietorship in San
Paolo, 221 ; *see* Colonists, Small
Holdings ; necessity of, 225 ; its
probability in San Paolo, 266 ;
in Paraná, 257-91 ; in Rio
Grande, 292-312
Peçanha, President, 78
Pedro, Dom, 65 ; as Regent, 66 ;
Emperor, 66 ; abdicates, 68

Pedro II., 68 ; attains majority, 68 ;
deported, 71
Penna, President, 78, 125, 259
Pernambuco, 30, 41, 137, 141
Peixoto, President, 73-6
Philip II. of Spain annexes
Portugal, 39
Pinzon, 30
Polish colonists, 275-7 ; 282-3 ; 291
Political life, 118-28 ; no parties,
124 ; power of aristocracy, 124
Porto Alegre, 98, 302
Portugal annexed by Spain, 39 ;
regains independence, 40
Portuguese in Brazil, 24-5
Protection, 129-31 ; cause of dear
living, 133

R

Railways, mileage, 105-7 ; man-
agement, 108 ; various systems,
109-12 ; construction, 113-15 ;
effect of, in giving value to land,
113-16 ; policy of colonisation
by, 116-17 ; of San Paolo, 173 ;
in Paraná, 289-90 ; general de-
scription of various systems,
378-9
Ramalho, 45
Ramos, Augusta, valorisation ex-
pert, 250-1
Republic, institution of, 71
Revolution, the, 71 ; history of, 71-8
Ribeiraon Preto, 137, 219
Rio Claro, colony, 282-6
Rio Grande, civil war in, 73, 75 ;
colonies of, 92 ; river traffic in,
98 ; politics of, 127-8 ; colonisa-
tion in, 292-312 ; description of,
293-4
Rio de Janeiro, history of, 52-54 ;
French occupation of, 53 ; created
a seat of government, 54 ; de-

scription of, at end of eighteenth
century, 54 ; bombardment of,
74 ; 93 ; the bay and city, 94-5 ;
provisioning of, 141
River transit, 96 ; in Rio Grande,
98 ; 169
Rivers, navigation of, 99 ; of San
Paolo, 169
Roads, 99, 102 ; San Paolo to
Minas and Matto Grosso, 169 ;
in Paraná, 286
Rosas, Argentine tyrant, 68
Rubber, 140 ; Amazonia, exports
of, 359 ; methods of exploitation,
360-3 ; species of plants, 363 ;
fall in prices, 364
Rum, 325

S

Sà, Mem de, 36 ; persuaded by
Jesuits to destroy Ramalho's
town, 46 ; drives French out of
Rio, 53
Sà, Eustacio de, 53
Salles, Dr. Campos, President, 78
Salt, 143
Santos, 46
São Paolo, *see* Paolo, San
Schools, *see* Education
Sebastião, Dom, killed in Africa, 38
Seringal, the, 361-2
Serras, the, 84-5, 106-7 ; 344-5,
348-9
Sertaon, the, 89 ; 337 ; 344-5
Silveira, influence in pacifying
Minas, 60
Silver, 373
Slavery, abolition of, 69 ; *see* Negroes
Slaves, Indian, 30
Slave trade, negro, 38
Small holdings in San Paolo, 218-
34 ; size of, 219 ; in Paraná,
257-91 ; in Rio Grande, 292-312

Smallpox, 125 ; in Ceará, 353
 Sousa, Affonso de, 32
 Sousa, Thomé de, 36 ; 46
 Spain annexes Portugal, 34
 States, the, rights of, 118, 124
 Steamship Lines, 380-1
 Stock-raising, early, 137-40 ; in
 Minas, 142 ; in Rio Grande, 143,
 309 ; in Ceará, 332-7
 Suffrage, universal, imperfect
 operation of, 18, 21
 Sugar, 17, 133-4 ; replaced by
 coffee in the north, 140 ; 141 ;
 321-2 ; in Ceará, 340-1
 Swiss colonists, 221

T

Tariffs, 374-5
 Tieté, river, 47, 99
 Timber, 144
 Tiradentes, revolutionist, 51
 Trade, Portuguese monopoly of,
 42, 51 ; defective organisation
 of, 133 ; uncertain prices, 134-5 ;
 policy of self-sufficiency, 374 ;
 see Exports
 Trails, 104
 Transit, means of, 96-117
 Transport, *see* Navigation, River
 Transit, Rivers, Roads, Railways
 Transport drivers of Paraná, 103,
 226-9
 Tybiriça, 46

U

Union, the, powers of, 120-4
 Unionism, 126-7
 Uruguay, annexation of, 64 ; inde-
 pendence assured, 68

V

Valorisation of coffee, 159-63 ;
 (239-66) ; the State purchases
 stocks of coffee, 235 ; the crisis,
 244 ; the first scheme, 245 ;
 negotiations for the loan, 231 ;
 the Taubaté conference, 251-3 ;
 prices of coffee to be obtained
 under scheme, 256-7 ; the State
 purchases, 258
 Venetian colonists, 295
 Villa Americana, 221
 Villeguignon, 53
 Vines, 299

X

Xavier, *see* Tiradentes

Y

Yellow fever, 42-3, 125
 Yguassu, river, and cataracts, 97 ;
 souvenirs of travel on an, 98

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